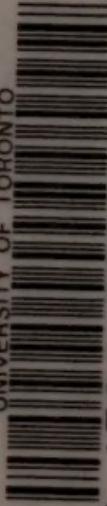
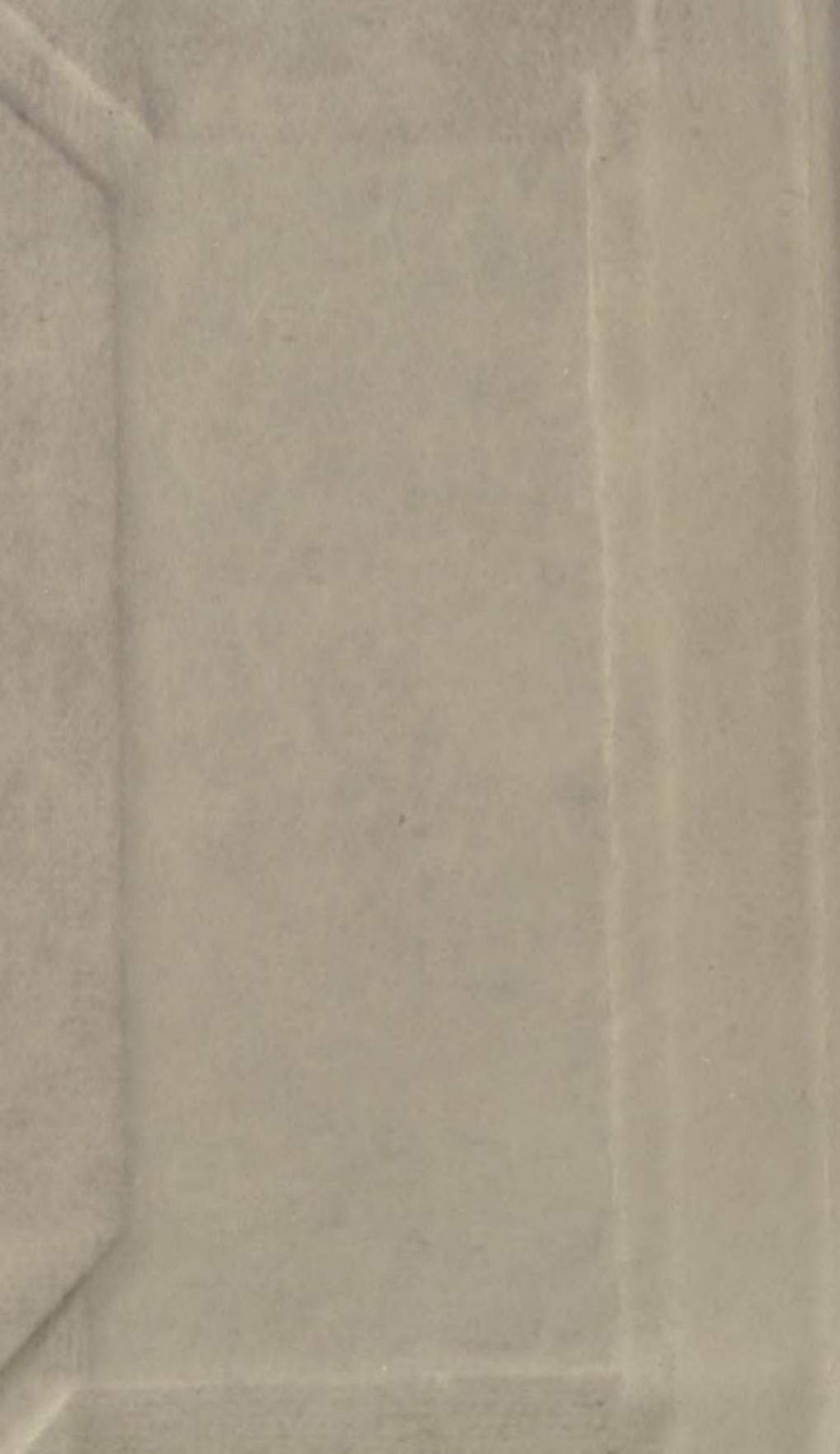


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HOYLE'S GAMES.

SHIRLEY WHAYOR

HOYLE'S GAMES,

IMPROVED AND ENLARGED

BY

NEW AND PRACTICAL TREATISES,

WITH THE

MATHEMATICAL ANALYSIS OF THE CHANCES

OF THE

MOST FASHIONABLE GAMES OF THE DAY,

FORMING AN EASY AND

Scientific Guide to the Gaming Table,

AND THE

MOST POPULAR SPORTS OF THE FIELD.

BY G. H ——, ESQ.

"Ita vita est hominum quasi cum Ludas tesseras—si illud quod
maximé opus est non jactu cadet illud quod accidet id arte ut cor-
regas."—TERENCE.

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THE present edition of “Hoyle’s Games” differs essentially from all its predecessors. The lover of the *lucidus ordo* will find a more logical disposition substituted for the *elaborate* confusion of the former editions. The various Games have been classified under the three several categories of Games of Pure Chance.—Mixed Games—and Mental and Bodily Games; preceded by a short introduction explaining the nature and object of the classes to which they belong.

Under the head of the first will be found entirely new treatises upon the Doctrine of Chances, Rouge et Noir, Roulette, the Lottery of France, and an Analysis of the Chances and Combinations of Dice. The various chances which these fascinating but

dangerous Games present, have been calculated according to the rules of mathematical analysis, with the view of dispelling an illusion, but too extensively cherished, that there exists certain systems of play by which the initiated can chain up the wheel of Fortune at pleasure, and win large sums with mathematical certainty.

Under the head of the second, a new treatise upon the fashionable game of Ecarté has been substituted for the *jejune* and defective article of the former edition. Short Whist has been revised, and Long Whist and Piquet enriched by some new calculations.

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Draughts, a game that, for scientific combination, vies with Chess itself. Thirdly, Diagrams, illustrating the mathematical theory of Billiards. Fourthly, the latest regulations on the subjects of Horse Racing and Cricket; and lastly, a succinct treatise upon that Old English sport connected with so many historical associations—Archery.

Such are the most prominent features of the New Edition of HOYLE'S GAMES, which the Editor flatters himself will present in its *ensemble* a recommendation that will ensure it, from the indulgence of the public, a favourable reception.



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PART I.

GAMES OF CHANCE.



HOYLE'S GAMES.

PART I.

GAMES OF CHANCE.

INTRODUCTION.

NOTHING, perhaps, throws out in more odious relief the weakness of human nature, or exhibits more forcibly its tendency to superstition, than Games of Chance. How often do we see gamesters who attribute their ill-luck to the persons who may accidentally approach them, or to other circumstances equally fortuitous! Some make it a rule always to play with the winning cards, from the conviction that a certain good luck is inherent in them; others, on the contrary, attach themselves with obstinate pertinacity to the losing ones, impressed with the idea, that as they have lost several times, it is less probable that they will lose again; as if the past could have any influence on the future. To such an extent are these superstitious ideas carried, that many players actually refuse to shuffle the cards unless in certain situations, and who think that they will infallibly lose by the slightest deviation from these absurd

rules. In fact, the major part seek for their advantage where it is not to be found, or neglect it altogether.

This observation will perhaps apply to the conduct of man in every action of his life in which chance has any share. He is governed by similar prejudices and errors, founded upon the erroneous, though almost universal belief, that the distribution of good and evil, and in general of all the events of this world, are due to a fatal power which acts without order or rule ; and thus he imagines it wiser to abandon himself to this blind divinity, whom he calls Fortune, rather than to force her to become favourable to him by following those rules of prudence which appear to him imaginary.

It is, therefore, not only of importance to gamesters, but to men in general, to know *that chance has rules* which may be discovered, and that by neglecting to make themselves masters of those rules, they are every hour committing faults, the disastrous consequences of which may with more justice be imputed to themselves than to the caprices of that destiny whom unjustly they accuse.

Impressed with this conviction, I am confident that a short analysis of the doctrine of chances will prove interesting even to those who have the least taste for abstract study. We all naturally like to see clearly into what we are about, independent of every interested motive ; and a man will certainly play with more pleasure when at every variation of his game he can calculate the chances for and against him ; for this knowledge will not only render him more tranquil as to the result, but will also teach him how ridiculous are the complaints in which gamesters indulge on the most trivial occasions.

If the exact knowledge of the chances of play

is not sufficient to enable a player to win, it will at least, in critical cases, serve him as an infallible rule of conduct, and will enable him to calculate the chances of those ruinous games which are every day becoming more generally introduced into this country. Moreover, it will teach him to despise the ignorant presumption of those quacks who affect to be able to turn the wheel of fortune at pleasure, and the besotted credulity of those who think that for a few pence they can purchase a system by which they may win thousands. *Conduct is fate*, and a prudent man will leave as little to chance as possible. We cannot, it is true, draw aside the veil which hangs over futurity ; but in games of chance, and likewise in many other events of life, we can calculate with mathematical precision the probability of a particular event.

Some of the greatest mathematicians have devoted much time and attention to this subject ; and the result of their scientific labours ought to terrify the most reckless gamester, by laying open to him the infinite and almost certain dangers to which he exposes his fortune and his happiness, when he engages himself in that labyrinth of chances which sooner or later must overwhelm him. I have, therefore, in the present edition, given a succinct analysis of the doctrine of chances, convinced that so far from having a tendency to promote play, it will be found the surest antidote against the glittering temptations of that demon which, above all others, is the most fatal to human happiness.

THE DOCTRINE OF CHANCES.

THE object of the calculation of probabilities is to discover facts, the reality of which is unknown to us.

The probability of an event may be said to be more or less, according to the number of chances by which it may happen, compared with the whole number of chances by which it may either happen or fail.

If we, therefore, constitute a fraction, whereof the numerator be the number of chances whereby an event may happen, and the denominator the number of all the chances whereby it may happen or fail, that fraction will be the proper designation of the probability of the event. Thus, if an event has 3 chances to happen and 2 to fail, the fraction $\frac{3}{5}$ will fitly represent the probability of its happening, and may be said to be the measure of it.

The same may be said of the probability of failing, which will likewise be measured by a fraction, whose numerator is the number of chances by which it may fail, and the denominator the whole number of chances for and against, as $\frac{2}{5}$.

Thus the number of the two fractions representing the probability of the advent or not of an event is equal to unity. When one, therefore, is given, the other may be found by subtraction.

The expectation, that is, the sum which the person who has a chance for the advent of an event is entitled to, if he resign his chance to another, is always the product of the fraction repre-

senting the probability multiplied into the sum expected.

Thus, if I have 3 chances in 5 to obtain 100*l.*, I say that my expectation is equal to the product of 100*l.* by the fraction $\frac{3}{5}$, and therefore that it is worth 60*l.* Thus, if the value of an expectation be given, as also the value of the thing expected, then dividing the first by the second, the quotient will express the probability of obtaining the sum expected. Again, the risk of losing any sum is the reverse of expectation, and the true measure of it is the product of the sum adventured, multiplied by the loss. What is called advantage or disadvantage in play, results from the combination of the several expectations of the gamesters, and of their several risks.

Thus, supposing A and B play together, and that A has deposited 5*l.* and B 3*l.*, and that the number of chances which A has to win is 4, and the number of chances B has to win 2, and that it were required to determine the advantage or disadvantage of the players, we may reason thus:—the whole sum staked being 8*l.*, and that A's chance is $\frac{4}{6}$, it follows that A's expectation is $8 \times \frac{4}{6} = 5\frac{1}{3}$, and for the same reason B's expectation is $8 \times \frac{2}{6} = 2\frac{2}{3}$.

Again, if from the respective expectations which the players have upon the whole sum deposited be subtracted from the amount of their stakes, the remainder will be the advantage or disadvantage of either, according as the difference is positive or negative.

When the obtaining of any sum requires the advent of several events, independent of each other, the value of the expectation is found by multiplying together the several probabilities of happening, and again multiplying the product by the value of

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the sum expected. Again, when the expectation depends on the happening of one event and the failure of another, then its value will be the product of the probability of the first happening, by the probability of the second failing, and that again by the value of the sum expected. This rule is applicable to the advent or not of as many events as may be assigned.

The above considerations apply to events which are independent; and in order to avoid any obscurity in the use of the terms, dependent and independent, we beg leave to define them.

Two events are independent when they have no connexion one with another, and that the happening of one has no influence upon the advent of the other. Two events are dependent when they are so connected that the probability of either happening is altered by the advent of the other.

From whence it may be inferred, that the probability of the happening of two events dependent, is the product of the probability of the advent or one of them by the probability which the other will have of arriving. This rule will extend to the happening of as many events as may be assigned.

But in the case of events dependent, to determine the probability of the advent of some of them, and at the same time the probability of the failing of some others, is a disquisition of greater difficulty, which will be more conveniently transferred to another place.

PROBLEM I.

To find the probability of throwing an ace in two throws.

The probability of throwing an ace the first time is $\frac{1}{6}$, wherefore $\frac{1}{6}$ is the first part of the probability required. If the ace be missed the first time, still it may be thrown the second; but the probability

of missing it the first time is $\frac{5}{6}$, and the probability of throwing it the second time is $\frac{1}{6}$, wherefore the probability of missing it the first time and throwing it the second is $\frac{5}{6} \times \frac{1}{6} = \frac{5}{36}$; this is the second part of the probability required; therefore the probability required in all is $\frac{1}{6} + \frac{5}{36} = \frac{11}{36}$.

PROBLEM 2.

To find the probability of throwing an ace in three throws.

The probability of throwing an ace the first time is $\frac{1}{6}$. If missed the first time, the ace may still be thrown in the two remaining throws; but the probability of missing the first time is $\frac{5}{6}$, and the probability of throwing it in the two remaining throws is, by Prob. 1, $= \frac{11}{36}$, therefore the probability of missing it the first time and throwing it in the two remaining times is $\frac{5}{6} \times \frac{11}{36} = \frac{55}{216}$, which is the second part of the probability required; wherefore the probability will be $\frac{1}{6} + \frac{55}{216} = \frac{91}{216}$.

By the above method it is obvious that the probability of throwing an ace in four throws is $\frac{671}{1296}$.

It is remarkable that he who undertakes to throw an ace in four throws, has just the same advantage as he who undertakes with two dice that six or seven shall come up in two throws, the odds in either case being 671 to 625; by which may be shown how to determine easily the gain of one party from the superiority of chances he has over his adversary, from the supposition that each stake is equal and denominated by unity. Let the odds be expressed by the ratio of a to b , then the respective probabilities of winning being $\frac{a}{a+b}$ and $\frac{b}{a+b}$ the right of the first upon the stake of the second, is $\frac{a}{a+b} \times 1$, and likewise the right of

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the second on the stake of the first is $\frac{b}{a+b} \times 1$; therefore the gain of the first is $\frac{a-b}{a+b} \times 1$, or barely $\frac{a-b}{a+b}$ and consequently the gain of him who undertakes that 6 or 7 shall come up in two throws, or who undertakes to fling an ace in four throws, is $\frac{671-625}{671+625} = \frac{46}{1296}$ is nearly $\frac{1}{25}$ part of his adversary's stake.

PROBLEM 3.

To find the probability of throwing two aces in two throws, it is simple that the probability required is $\frac{1}{6} \times \frac{1}{6} = \frac{1}{36}$.

PROBLEM 4.

To find the probability of throwing two aces in three throws.

If an ace be thrown the first time, then it will only require to be thrown once in two throws ; but the probability of throwing it the first time is $\frac{1}{6}$, and the probability of throwing it once in two throws is, we have seen, $\frac{11}{36}$; the probability, therefore, of throwing it the first time, and then throwing it once in two throws, is $\frac{1}{6} \times \frac{11}{36} = \frac{11}{216}$ = to the first part of the probability required.

If the ace be missed the first time, there still remains the probability of throwing twice together ; but the probability of missing it the first time, is $\frac{5}{6}$, and the probability of throwing it twice together is $\frac{1}{36}$; therefore, the probability of both events $= \frac{5}{6} \times \frac{1}{36} = \frac{5}{216}$. This is the second part of the probability required, wherefore the whole probability is $= \frac{11+5}{216} = \frac{16}{216}$.

In like manner, the probability of throwing two aces in four throws, is $=\frac{1}{1296}$; and by the same way of reasoning, we may gradually find the probability of throwing an ace as many times as shall be demanded in a given number of times.

To find any chances there are upon any number of dice, each of the same number of faces--to throw any given number of points.

SOLUTION.

Let $P+1$ be the number of points given to the number of dice; f the number of faces in each die, make $p-f=q$, $q-f=r$, $r-f=s$, $s-f=f=t$, &c.

Thus, for example, let it be required to find how many chances there are of throwing 16 points with four dice, then making $P+1=16$ we have $P=15$, from which the number of chances required will be found.

$$\begin{array}{rcl} + \frac{1}{2} \times \frac{1}{2} \times \frac{1}{3} - & = +455 \\ - \frac{9}{1} \times \frac{8}{2} \times \frac{7}{3} \times \frac{4}{4} - & = -336 \\ + \frac{1}{3} \times \frac{2}{2} \times \frac{1}{1} \times \frac{1}{4} \times \frac{3}{3} & = + 6 \end{array}$$

But $455 - 336 + 6 = 125$, and then 125 is the number of chances required.

COROLLARY.

All the points equally distant from the extremes, that is, from the least and greatest number of points that are upon the dice, have the same number of chances by which they may be produced; wherefore, if the number of points given be nearer to the greater extreme than to the less, let the number of points given be subtracted from the sum of the extremes, and work with the remainder, and the operation will be shortened.

Thus, if it be required to find the number of

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chances of throwing 16 points with four dice. Let 16 be subtracted from 28, the sum of the two extremes, 4 and 24, and the remainder will be 12; from which it may be concluded that the number of chances for throwing 16 points is the same as throwing 12 points.

PROBLEM 5.

To find the probability of throwing one ace, and no more, in four throws.

This case is different from the problem of the probability of throwing an ace in four throws. In the present case there is a restraint laid on the event, for whereas in the former case he who undertakes to throw an ace desists from throwing when once the ace has come up; in this he obliges himself, after it has come up, to a farther trial, which is wholly against him, excepting the last throw of the four, after which there is no trial, and, therefore, from the unlimited probability of the ace being thrown once in four throws, we must subtract the probability of its being thrown twice in that number of throws. Now the first probability, it has been shewn, is $\frac{671}{1296}$, and the second, $\frac{171}{1296}$, from which it is evident that the probability required is $\frac{500}{1296}$, and the probability contrary, $\frac{796}{1296}$, therefore the odds of throwing one ace, *and no more*, in four throws, are 796 to 500, or 8 to 5; and the same method may be followed in higher cases.

PROBLEM 6.

If A and B play together, and A wants but one game of being up, and B two, what are their respective probabilities of winning?

It must be recollect that the set will necessarily be ended in two games at most; for if A

wins the first game, there is no need of any farther trial; but if B wins it, then both parties will want but one game of being up. Whence, it is certain, that A wants to win but one game in two, and that B must win twice running. Now, supposing that A and B have an equal chance of winning a game, then the probability which B has of winning the first game will be $\frac{1}{2}$, and, consequently, of winning twice together will be $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$, and, therefore, the probability of A's winning one in two games, will be $1 - \frac{1}{4} = \frac{3}{4}$, or 3 to 1, which are the odds in favour of A.

PROBLEM 7.

A and B play together. A wants one game of being up, and B two, but the chances in favour of B are double those of A. Required the respective probabilities of each.

In this, as in the preceding problem, it is obvious that B ought to win twice running. Now, since B has two chances to win a game and A one chance for the same, B's probability of winning a game is $\frac{2}{3}$, wherefore, his probability of winning twice in succession, is $\frac{2}{3} \times \frac{2}{3} = \frac{4}{9}$; and, consequently, A's probability of winning the set is $1 - \frac{4}{9} = \frac{5}{9}$, or 5 to 4.

Although, by the above formula, we may determine the odds when two players want a certain number of games of being up, and that they have any given proportion of chances for winning a game, we annex the following table, showing those odds when the number of games wanting does not exceed six, and that the skill of the players is equal.

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Games wanting.	Odds of winning.	Games wanting.	Odds of winning.	Games wanting.	Odds of winning.
1. 2 ..	3 to 1	2. 3 ..	11 to 5	3. 5 ..	99 to 29
1. 3 ..	7 to 1	2. 4 ..	26 to 6	3. 6 ..	219 to 37
1. 4 ..	15 to 1	2. 5 ..	57 to 7	4. 5 ..	163 to 97
1. 5 ..	31 to 1	2. 6 ..	120 to 8	4. 6 ..	382 to 130
1. 6 ..	63 to 1	3. 4 ..	42 to 22	5. 6 ..	638 to 386

From the foregoing problems it appears that, when A wants but one game of a set, and B two, the odds in favour of the former are 3 to 1. The accuracy of this calculation, however, has been questioned by the celebrated d'Alembert, who illustrates his position by the game of Croix ou Pile (Heads or Tail), which is too well known to need a definition.

CROIX OU PILE.

Required what are the odds of throwing heads or croix in two successive throws.

The most common answer given by authors who have treated this question is, that there are four combinations.

FIRST COUP.	SECOND COUP.
Croix.	Croix.
Pile.	Croix.
Croix.	Pile.
Pile.	Pile.

In these four combinations there is only one by which the thrower loses; the odds are then 3 to 1 in his favour. If he betted in three coups, he would find eight combinations, seven in his favour, and one against him; the odds would be, therefore, 7 to 1; but, says d'Alembert, *is this correct?* For to consider only the two coups, must we not reduce to one the two combinations,

which give croix the first coup; for head once thrown, the game is over; thus, then, there are really only three combinations possible, *viz.*

Croix.....	first coup.
Pile and Croix.....	1 and 2 coup.
Pile et Pile.....	1 and 2 coup.

The odds are, therefore, only 2 to 1. Again, in three coups we shall find,

Croix.		
Pile.	Croix.	
Pile.	Pile.	Croix.
Pile.	Pile.	Pile.

The odds are, therefore, in this case, only 3 to 1.

We invite the attention of our readers to this problem, which, in the opinion of the celebrated mathematician alluded to, would go far to reform many of the methods pursued in the analysis of games of chance.

To find in how many trials an event will probably happen.

EXAMPLE 1.—*Required in how many throws one may undertake, with an equality of chance, to throw two aces with two dice.*

Now the number of chances upon two dice being 36, out of which there is but one chance for two aces, it follows that the number of chances against it is 35; multiply therefore 35 by the log. 0·7, and the product, 24·5, will show that the number of throws requisite to that effect will be between 24 and 25.

EXAMPLE 2.—*In a lottery whereof the number of blanks is to the number of prizes as 39 to 1, to find*

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how many tickets a person ought to take to make it an equal chance for one or more prizes.

Multiply 39 by 0.7, and the product will show you that the number of tickets requisite to that effect will be 27 or 28 at most. Likewise, in a lottery whereof the number of blanks is to the number of prizes as 5 to 1, multiply 5 by 0.7, and the product 3.5 will show that there is more than an equality of chance in four tickets for one or more prizes, but less than an equality in three.

REMARKS.

In a lottery whereof the blanks are to the prizes as 39 to 1, if the number of tickets in all were but 40, the proportion above mentioned would be altered, for 20 tickets would be a sufficient number for the just expectation of a single prize.

Again, if the number of tickets in all were 80, still preserving the proportion of 39 blanks to 1 prize, and, consequently, supposing 78 blanks to 2 prizes, this proportion would still be altered; wherefore, if the proportion of the blanks to the prizes is often repeated, as it usually is in lotteries, the number of tickets requisite for a prize will be always found by taking $\frac{7}{10}$ of the proportion of the blanks to the prizes.

By the following table, therefore, the number of trials necessary to make it probable that an event will happen three, four, five, &c. times, will be easily found:—

For a single event,	multiply the number of	
	chances against its advent by.....	0.7
For a double event.....		1.678
For a triple event		2.675
For a quadruple event.....		3.672
For a quintuple event		4.670
For a sextuple event		5.668

From what has been said it will be obvious that although we may with an equality of chance contend about the happening of an event once in a certain number of trials, yet we cannot contend for its happening twice in a double number of trials, or three times in triple that number; and so on. Thus, although the chances are equal of throwing two aces with two dice in 25 throws, yet we cannot undertake that the two aces shall come up twice in 50 throws, the number requisite being 58 or 59 times; and much less, that it will come up three times in 75 throws, the number requisite being 93 and 94; so that we cannot undertake that in a very great number of trials the happening shall be oftener than in the proportion of 1 to 36. And therefore we may lay it down as a maxim, that events at long run will not happen oftener than in the proportion of the chances they have to happen in one trial, and if we assign any other proportion, the odds against us will increase continually.

Analysis of the Chances, or the Points produced by two or more Dice.

With two dice it is evident that we may produce thirty-six different combinations, for each of the six faces of one may be successively combined six times with each of the six faces of the other. Therefore, with a number of dice = n , the number of different combinations they will produce will be 6^n .

The odds of throwing doublets, therefore, with two dice, are 35 to 1.

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But we shall find—

that 3 may be thrown 2 different ways.

4	3	—
5	4	—
6	5	—
7	6	—
8	5	—
9	4	—
10	3	—
11	2	—
12	.....	1	—

which is evident by the following table, which expresses the thirty-six combinations:

TABLE.

2	3	4	5	6	7
3	4	5	6	7	8
4	5	6	7	8	9
5	6	7	8	9	10
6	7	8	9	10	11
7	8	9	10	11	12

Let us suppose that in the first vertical column of this table one of the dice is thrown successively upon every one of its faces, the other constantly coming up 1; in the second, that one of them comes constantly 2, and the other each of its six faces in succession, and so on, the same numbers will be found upon the same diagonal line; thus we shall find 7 is the number most often thrown with two dice, and 2 and 12 in the opposite ratio. Again, if we take the trouble of forming a table for three dice, we shall have six tables of thirty-six numbers each, the first of which will have 3 on the left side at top, and 13 at the bottom of the right side; the last will have 8 on the left side, and 18 at the bottom of the right column; thus

we shall find the number of times 8 may come up is = to $6+5+4+3+2+1=21$; thus there are 15 times for 7, 10 times for 6, 6 times for 5, 3 times for 4, 1 for 3, 25 times for 9, 27 times for 10, 27 times for 11, 25 for 12, 9 for 13, 15 times for 14, 10 times for 15, 6 times for 16, 3 times for 17, 1 only for 18. Thus 10 and 11 are with three dice the most advantageous to bet in favour of, the odds in favour of their being thrown being 27 to 216, or 8 to 1.

By this method we may determine the numbers most likely to be thrown with any number of dice.

It will be obvious from the above, how essential it is to know the number of combinations of which any number of dice are susceptible, in order to avoid accepting disadvantageous bets, which is but two often the fate of those who do not reflect that all chances are in some degree submitted to mathematical analysis.

Two dice, as we have just observed, being taken together, form *twenty-one* numbers, and considered separately, will give thirty-six different combinations. Of the 21 coups which may be thrown with two dice, the first 6 are doublets, and can only be thrown once, as the 2 sixes, &c. &c. The 15 other coups, on the contrary, have each two combinations, the aggregate number of the whole being 36. The odds, therefore, of the caster throwing a given doublet are 1 to 35; and again, of his throwing an *indeterminate* one, 1 to 5; and 1 to 17 that he throws 6 and 4, seeing that this point gives him two chances against 34.

But it is not the same with the number of points of two dice joined together; the combination of their chances is in ratio to the multitude of the different faces which can produce these numbers, and is as follows :

NUMBERS.

2	1 and 1
3	2 and 1..1 and 2
4	2 and 2..3 and 1..1 and 3
5	4 and 1..1 and 4..2 and 3..3 and 2
6	3 and 3..5 and 1..1 and 5..4 and 2..2 and 4
7	6 and 1..1 and 6..5 and 2..2 and 5..4 and 3..3 and 4
8	4 and 4..6 and 2..2 and 6..5 and 3..3 and 5
9	6 and 3..3 and 6..5 and 4..4 and 5
10	5 and 5..6 and 4..4 and 6
11	6 and 5..5 and 6
12	6 and 6

If, therefore, we bet to throw 11 the first time with two dice, the odds are 2 to 34, and if 7, 6 to 30, there being six ways by which 7 may be thrown, and thirty against it. We must, however, observe that in the eleven different numbers which may be thrown with two dice, 7, which is the mean proportional between 2 and 12, has more chances than the others, which on their side have more or less chances in their favour as they approach the two extremes.

This difference of the multitude of chances produced by the mean numbers compared to the extreme, increases considerably in ratio to the number of dice. It is such, that if we make use of seven dice, which produce points from 7 up to 42, we shall find that we shall almost invariably throw the mean numbers 24 and 25, or those which approach the nearest to them, *viz.* 22, 23, 26, 27; and if, instead of seven dice, we make use of twenty-five, which will produce numbers from 25 to 150; we might with safety bet an equal wager to throw 86 and 87.

The above remark is important, as it must tend to expose at a glance the gross imposition of those

lotteries composed of seven dice, which notwithstanding the vigilance of the police, are still to be found at country fairs and on race courses. These lotteries, for the mean numbers only, hold out an advantage inferior to the sum staked, while, on the other hand, they present the glittering temptation to the uninitiated of a large prize for the extreme numbers, which almost never come up, for to shew the ruinous nature of these schemes, it will be only necessary to state that the odds of throwing a raffle with seven dice are 40,000 to 1, while the value of the prize is not the sixth part of the risk.

A thorough knowledge of the above rules is indispensable at the games of Hazard and Backgammon, and will enable the player to calculate with rapidity all the various chances they present.

COMBINATIONS OF DICE.

A TABLE showing the Number of Throws upon any Number of Dice, from 1 to 9 inclusive.

For two dice.

To have	Determinate throws.	Indeterm. throws.
2 simples.....	2 there are	30
1 doublet.....	1	6

For three dice.

3 simples.....	6	120
1 doublet and 1 simple.....	3	90
1 triplet	1	6

For four dice.

To have	Determinate throws.	Indeterm. throws.
4 simples	24 there are	360
1 doublet and 2 simples....	12	720
2 doublets	6	90
1 triplet and 1 simple.....	4	120
1 quadruple	1	6

For five dice.

5 simples	120	720
1 doublet and 3 simples....	60	3600
2 doublets and 1 simple....	30	1800
1 triplet and 2 simples	20	1200
1 triplet and 1 doublet.....	10	300
1 quadruple and 1 simple	5	150
1 quintuple	1	6

For six dice.

6 simples	720	720
1 doublet and 4 simples ..	360	10800
2 doublets and 2 simples..	180	16200
3 doublets	90	1800
1 triplet and 3 simples	120	7200
1 triplet, 1 doublet, and } 1 simple	60	7200
2 triplets	20	300
1 quadruple and 2 simples..	30	1800
1 quadruple and 1 doublet..	15	450
1 quintuple and 1 simple ..	10	180
1 sextuple.....	1	6

For seven dice.

1 doublet and 5 simples ..	2520	15120
2 doublets and 3 simples ..	1260	75600
3 doublets and 1 simple ..	630	37800
1 triplet and 4 simples	840	25200
1 triplet, 1 doublet, and } 2 simples.....	420	75600

To have	Determinate throws.	Indeterm. throws.
1 triplet and 2 doublets	210	there are 12600
2 triplets and 1 simple	140	..... 8400
1 quadruple and 3 simples..	210	..... 12600
1 quadruple, 1 doublet, and { 1 simple	105	..... 12600
1 quadruple and 1 triplet..	35	..... 1050
1 quintuple and 2 simples..	42	..... 2520
1 quintuple and 1 doublet..	21	..... 630
1 sextuple and 1 simple....	7	..... 210
1 septuple.....	1	..... 6

For eight dice.

2 doublets and 4 simples..	10080	..... 151200
3 doublets and 2 simples..	5040	..... 302400
4 doublets.....	2520	..... 37800
1 triplet and 5 simples	6720	..... 40320
1 triplet, 1 doublet, and { 3 simples	3360	..... 403200
1 triplet, 2 doublets, and { 1 simple	1680	..... 302400
2 triplets and 2 simples....	1120	..... 100800
2 triplets and 1 doublet....	560	..... 33600
1 quadruple and 4 simples..	1680	..... 50400
1 quadruple, 1 doublet, and { 2 simples.....	840	..... 151200
1 quadruple and 2 doublets	420	..... 25200
1 quadruple, 1 triplet, and { 1 simple.....	280	..... 33600
2 quadruples	70	..... 1050
1 quintuple and 3 simples..	336	..... 20160
1 quintuple, 1 doublet, and { 1 simple	168	..... 20160
1 quintuple and 1 triplet..	56	..... 1680
1 sextuple and 2 simples....	56	..... 3360
1 sextuple and 1 doublet....	28	..... 840
1 septuple and 1 simple....	8	..... 240
1 octuple	1	..... 6

COMBINATIONS OF DICE.

<i>For nine dice.</i>	Determinate. throws.	Indeterm. throws.
To have		
3 doublets and 3 simples	45360	there are 907200
4 doublets and 1 simple..	22680	..... 680400
1 triplet, 1 doublet, and 4 simples	30240	..... 907200
1 triplet, 2 doublets, and 2 simples.....	15120	..... 272160
1 triplet and 3 doublets..	7560	..... 454600
2 triplets and 3 simples...	10080	..... 604800
2 triplets, 1 doublet, and 1 simple.....	5040	..... 907200
3 triplets	1680	..... 33600
1 quadruple and 5 simples	15120	..... 90720
1 quadruple, 1 doublet, and 3 simples.....	7560	..... 907200
1 quadruple, 2 doublets, and 1 simple.....	3780	..... 680400
1 quadruple, 1 triplet, and 2 simples.....	2520	..... 453600
1 quadruple, 1 triplet and 1 doublet	1260	..... 151200
2 quadruples and 1 simple	630	..... 37800
1 quintuple and 4 simples	3024	..... 907200
1 quintuple, 1 doublet, and 2 simples	1512	..... 272160
1 quintuple and 2 doublets	756	..... 45360
1 quintuple, 1 triplet, and 1 simple.....	504	..... 60480
1 quintuple and 1 quad.	126	..... 3780
1 sextuple and 3 simples ..	504	..... 30240
1 sextuple, 1 doublet, and 1 simple.....	252	..... 30240
1 sextuple and 1 triplet ...	84	..... 2520
1 sextuple and 2 simples	72	..... 4320
1 sextuple and 1 doublet	36	..... 1080
1 octuple and 1 simple ...	9	..... 270
1 noncouple	1	..... 6

TABLE showing the Number of different Ways in which a certain Number or determinate Point may be thrown with any Number of Dice, from 1 to 9 inclusive.

With two dice.

There are 1	throws which give	2 or 12
2	.....	3 or 11
3	.....	4 or 10
4	.....	5 or 9
5	.....	6 or 8
6	.....	7

With three dice.

There are 1	throws which give	3 or 18
3	.....	4 or 17
6	.....	5 or 16
10	.....	6 or 15
15	.....	7 or 14
21	.....	8 or 13
25	.....	9 or 12
27	.....	10 or 11

With four dice.

There are 1	throws which give	4 or 24
4	.....	5 or 23
10	.....	6 or 22
20	.....	7 or 21
35	.....	8 or 20
56	.....	9 or 19
80	.....	10 or 18
104	.....	11 or 17
125	.....	12 or 16
140	.....	13 or 15
146	.....	14

COMBINATIONS OF DICE.

With five dice.

There are 1	throws which give	5 or 30
5	.....	6 or 29
15	.....	7 or 28
35	.....	8 or 27
70	.....	9 or 26
126	.....	10 or 25
205	.....	11 or 24
305	.....	12 or 23
360	.....	13 or 22
480	.....	14 or 21
561	.....	15 or 20
795	.....	16 or 19
930	.....	17 or 18

With six dice.

There are 1	throws which give	6 or 36
6	.....	7 or 35
21	.....	8 or 34
56	.....	9 or 33
126	.....	10 or 32
252	.....	11 or 31
456	.....	12 or 30
756	.....	13 or 29
1161	.....	14 or 28
1666	.....	15 or 27
2247	.....	16 or 26
2856	.....	17 or 25
3431	.....	18 or 24
3906	.....	19 or 23
4222	.....	20 or 22
4332	.....	21

With seven dice.

There are 1	throws which give	7 or 42
7	.....	8 or 41
28	.....	9 or 40
84	.....	10 or 39

There are 210	throws which give	11 or 38
462	.....	12 or 37
917	.....	13 or 36
1667	.....	14 or 35
2807	.....	15 or 34
4417	.....	16 or 33
6538	.....	17 or 32
9142	.....	18 or 31
12117	.....	19 or 30
15267	.....	20 or 29
18327	.....	21 or 28
20993	.....	22 or 27
22967	.....	23 or 26
24017	.....	24 or 25

With eight dice.

There are 1	throws which give	8 or 48
8	.....	9 or 47
36	.....	10 or 46
120	.....	11 or 45
330	.....	12 or 44
792	.....	13 or 43
1708	.....	14 or 42
3368	.....	15 or 41
6147	.....	16 or 40
10480	.....	17 or 39
16808	.....	18 or 38
25488	.....	19 or 37
36688	.....	20 or 36
50288	.....	21 or 35
65808	.....	22 or 34
82384	.....	23 or 33
98813	.....	24 or 32
113688	.....	25 or 31
125588	.....	26 or 30
133288	.....	27 or 29
135954	.....	28

With nine dice.

There are 1	throws which give	9 or 54
9	.....	10 or 53
45	.....	11 or 52
165	.....	12 or 51
495	.....	13 or 50
1287	.....	14 or 49
2994	.....	15 or 48
6354	.....	16 or 47
12465	.....	17 or 46
22825	.....	18 or 45
39303	.....	19 or 44
63999	.....	20 or 43
98970	.....	21 or 42
145899	.....	22 or 41
205560	.....	23 or 40
277469	.....	24 or 39
359469	.....	25 or 38
447669	.....	26 or 37
536569	.....	27 or 36
619369	.....	28 or 35
689715	.....	29 or 34
740619	.....	30 or 33
767394	.....	31 or 32

By the following simple method we shall discover the number of throws upon any number of dice, reckoning those only once which may occur in more ways than one.

Suppose $P = 6$, and the number of points for one dice will be $= P$; for two dice, $= P \times \frac{P+1}{2}$; for three dice, $= P \times \frac{P+1}{2} \times \frac{P+2}{3}$; for four dice, $= P \times \frac{P+1}{2} \times \frac{P+2}{3} \times \frac{P+3}{4}$; for five dice,

$= P \times \frac{P+1}{2} \times \frac{P+2}{3} \times \frac{P+3}{4} \times \frac{P+4}{5}$, &c. or 6, 21, 56, 126, and 252, and so on, for any number of dice.

RAFFLE.

ODDS on a RAFFLE with Nine Dice, or the highest in Three Throws with Three Dice.

It is 10077695 to 1 you do not throw 54.

1007768	..	1	53 or more
183229	..	1	52 —
45809	..	1	51 —
14093	..	1	50 —
5032	..	1	49 —
2016	..	1	48 —
886	..	1	47 —
422	..	1	46 —
215	..	1	45 —
116	..	1	44 —
66	..	1	43 —
39	{	1	42 —
very near	39½	{ 1	—
	24½..	1	41 —
very near	15¾..	1	40 —
	10½..	1	39 —
very near	7½..	1	38 —
	5 ..	1	37 —
or	3½..	1	36 —
	2½..	{ 1	35 —
or	28 ..	11 }	—
	11 ..	6	34 —
	9 ..	7	35 —

It is exactly equal that you throw.... 32 or more.

RAFFLE.

The following is a guide to any person inclined to sell or buy a chance.

It is 1 out of	3 you do not throw	36 or more.
1	4	37 —
1	5	38 —
1	8	39 —
1	11	40 —
1	17	41 —
1	28	42 —
1	47	43 —
1	81	44 —
1	150	45 —
1	293	46 —
1	613	47 —

Explanations of the foregoing Table.

Suppose a prize put up worth 20*l.*, that one person throws 46, and there are eight more to throw; in the table you will find that one out of eleven has a right to throw 40; therefore his chance is worth one half of the prize and $\frac{3}{11}$ of the other half, equal to 12*l.* 14*s.* 6*½d.* $\frac{2}{11}f.$.

Cases of Curiosity.

It is 1585 to 1 you do not throw 47 neither more	nor less
807 .. 1	46
440 .. 1	45
255 .. 1	44
156 .. 1	43
100 .. 1	42
68 .. 1	41
48 .. 1	40
35 .. 1	39
7 .. 1	38
21 .. 1	37
17 <i>¾</i> .. 1	36
15 <i>¼</i> .. 1	35

THE GAME OF HAZARD.

Any number of persons may play. The person who takes the box and dice throws a main, that is to say, a chance for the company, which must be above four, and not exceed nine, otherwise it is no main, consequently he must keep throwing till he brings five, six, seven, eight, or nine ; this done, he must throw his own chance, which may be any above three, and not exceeding ten, if he throw two aces or trois-ace (commonly called crabs) he loses his stakes, let the company's chance, called the main, be what it will. If the main should be seven, and seven or eleven be thrown immediately after, it is what is called a nick, and the caster (the present player) wins out his stakes ; also if eight be the main, and eight or twelve thrown immediately after, it is also called a nick, and the caster wins his stakes. The caster throwing any other number for the main, such as is admitted, and bringing the same number directly afterwards, that is likewise termed a nick, and he then also wins whatever stakes he has made.

Every three successive mains the caster wins, he is to pay half-a-guinea to the box or furnisher of the dice.

The meaning of a stake or bet at this game differs somewhat from the other. If a person choose to lay a sum of money with the thrower or caster, he must put his cash upon the table, within a circle which is described for that purpose ; when he has done this, if the caster agree

to it, he knocks the box upon the table at the person's money with whom he intends to bet, or particularly mentions at whose money he throws, which is sufficient, and he is obliged to answer whatever sum is down, unless the staker calls to cover ; in that case the caster is obliged to stake also, otherwise the bets would be void. It is optional in the person who bets with the thrower, to bar any throw which the caster may be going to cast, provided neither of the dice be seen ; if one die should be discovered, the caster must throw the other to it, unless the throw is barred in proper time.

The common odds, which are absolutely necessary to be understood before any person attempts to play or bet at this game, are as follow :—If seven be thrown for the main, and four the chance, it is 2 to 1 against the person who throws ; if six to four be thrown, 5 to 3 ; if five to four, 4 to 3 ; seven to nine, 3 to 2 ; seven to six, 3 to 2, barring the two trois : with the two trois, only 6 to 5 : seven to five, 3 to 2 ; six to five an even bet, barring the doublets or the two trois : with the trois, 5 to 4 ; eight to five, an even bet, barring the two fours : 5 to 4 with the two fours : nine to five, even ; nine to four is 4 to 3 ; the nick of seven is 7 to 2, but often laid but 10 to 3, and 5 to 1 you do not nick six or eight.

To illustrate these calculations still more clearly, the following table will be serviceable :—

TABLE OF THE ODDS.

7 to 4 is 2 to 1.....	} against the caster.
6 to 4 is 5 to 3.....	
5 to 4 is 4 to 3	
7 to 9 is 3 to 2.....	
7 to 6 { 3 to 2, barring the two trois, { 6 to 5, with the two trois,..	
7 to 5 is 3 to 2.....	
6 to 5 { even, barring the two trois, { 5 to 4 with the two trois,...	
8 to 5 { even, barring the two fours, { 5 to 4 with the two fours,..	
9 to 5 even.....	
9 to 4 is 4 to 3.....	

The nick of seven is 7 to 2, often laid 10 to 3.

The nick of six and eight is 5 to 1.

It is necessary to be perfectly master of these odds, in order to play the prudent game, and to make use of them by way of insuring bets in what is called hedging, in case the chance happens to be unlikely ; for by taking the odds, a ready calculator secures himself, and often stands part of his bet to a certainty. For example, if seven be the main, and four the chance, and he should have 5*l.* depending on the main, by taking 6*l.* to 3*l.* he must either win 2*l.* or 1*l.*; and, on the contrary, if he should not like his chance, by laying the odds against himself, he must save in proportion to the bet he has made.

CALCULATIONS FOR BETTING.

The various ways of throwing all the different mains and chances are explained in the chapter on the Analysis of the Combinations of Two Dice.

HAZARD.

5 Main, and	4	Chance	4 to 3 agst the caster.
5	6	5 to 4	for the caster.
5	7	3 to 2	for the caster.
5	8	5 to 4	for the caster.
5	9	equal betting.	
5	10	4 to 3	agst the caster.
6	4	5 to 3	agst the caster.
6	5	5 to 4	agst the caster.
6	7	6 to 5	for the caster.
6	8	equal betting.	
6	9	5 to 4	agst the caster.
6	10	4 to 3	agst the caster.
7	4	2 to 1	agst the caster.
7	5	3 to 2	agst the caster.
7	6	6 to 5	agst the caster.
7	8	6 to 5	agst the caster.
7	9	3 to 2	agst the caster.
7	10	2 to 1	agst the caster.
8	4	5 to 3	agst the caster.
8	5	5 to 4	agst the caster.
8	6	equal betting.	
8	7	6 to 5	for the caster.
8	9	5 to 4	agst the caster.
8	10	5 to 3	agst the caster.
9	4	4 to 3	agst the caster.
9	5	equal betting.	
9	6	5 to 4	for the caster.
9	7	3 to 2	for the caster.
9	8	5 to 4	for the caster.
9	10	4 to 3	agst the caster.

That the caster does not nick:—

5 is.....	8 to 1
6	5 to 1
7	7 to 2
8	8 to 1
2	8 to 1

That the caster does not throw crabs :—

6 main is.....	31 to 5
7	8 to 1
8	31 to 5
9	5 to 1

The following Table shews the plan of the Game :—

Main for the Caster.	The Caster wins by nicking.	The Setter wins by Caster's crabbing.
5	5	2, 3, or 11 or 12
6	6 or 12	2, 3, or 11
7	7 or 11	2, 3, or 12
8	8 or 12	2, 3, or 11
9	9	2, 3, or 11 or 12

When the caster throws a main, which is 5, 6, 7, 8, or 9, per Table, he is then to throw his chance, which must be either 4, 5, 6, 7, 8, 9, or 10; should he neither nick or crab it, he is then to abide by the chance, and if he throws that chance before the main, he wins all the money set; but if he throws the main before the chance, then he loses all.

Thus if the main be 7, and each person stake a guinea, the gain of the setter is about $3\frac{1}{2}$ per guinea.

If the main be 6 or 8, the gain of the setter is $5\frac{1}{4}$ in a guinea.

But if the main be 5 or 9, the gain of the setter is about $3\frac{3}{4}$ in a guinea.

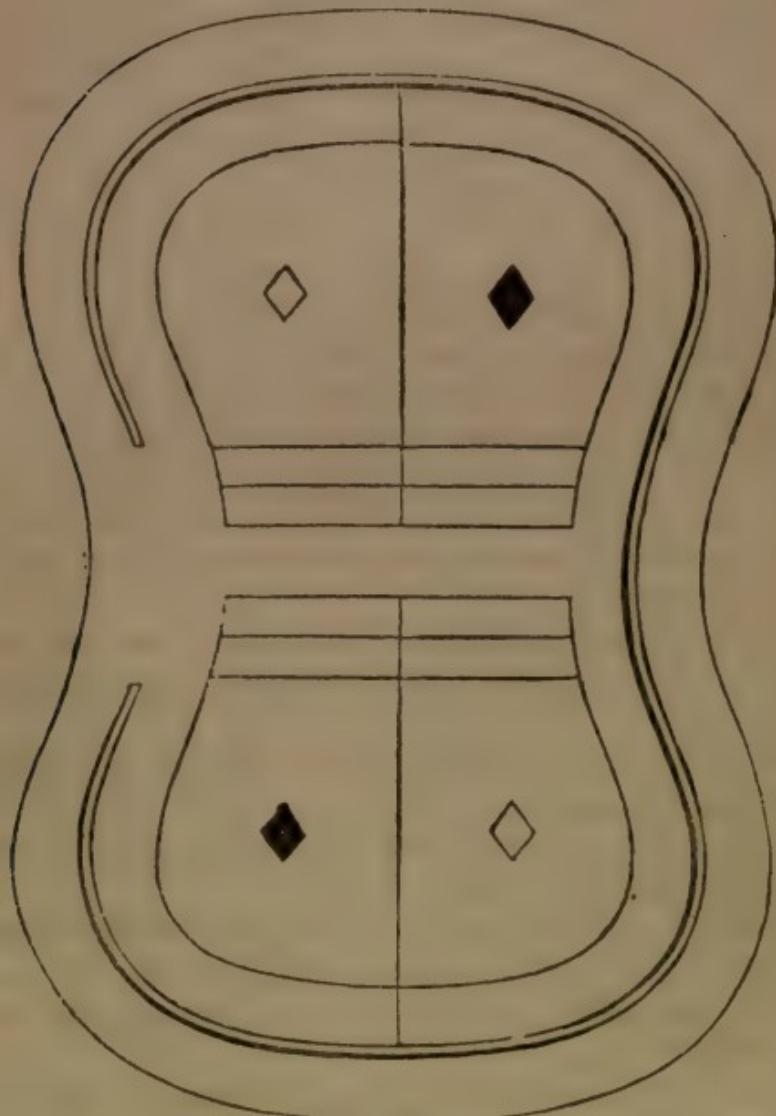
However, if any person be determined to set upon the first main that is thrown, his chance, supposing each stake to be a guinea, is exactly $4\frac{5}{8}$.

Hence the probability of a main to the probability of no main, is nearly 27 to 28.

Any one undertaking to throw a six or an ace with two dice, in one throw, ought to lay 5 to 4.

At all games of chance with dice, the chances are against the caster, whereas at those with cards they are almost invariably in favour of the banker.

ROUGE ET NOIR.



A Rouge et Noir Table.

THIS game, which is comparatively of modern origin, is sometimes called *trente et quarante*, but more generally Rouge et Noir, from the colours marked on the *tapis* or green cloth with which the table is covered. The march of the game is as follows:—

The first parcel of cards played is usually for Noir, the second for Rouge, though sometimes the cards are cut to determine which shall begin. Any number of persons may play, and risk their money on the colour they please, placing the stakes in the outer semicircle; but after the first card is turned up, no money can be staked for that *coup*.

The dealer and the croupier being seated opposite to each other, the former takes six packs of card, shuffles and distributes them in various parcels to the different players to shuffle and mix. He then finally shuffles them, and removes the end cards into various parts of the *three hundred and twelve* cards, until he meets with a court card, which he must place upright at the end. This done, he presents the pack to the punters to cut, who place the court card where the dealer separates the pack, and that part of the pack beyond the court card, he places at the end nearest to him, leaving the court card at the bottom of the pack.

The dealer then takes a quantity of cards, about as many as a pack, and looking at the first card to ascertain its colour, places it on the table face downwards, and takes two cards, one red, the other black, and sets them back to back; these are turned and placed conspicuously as often as the colour varies in each event. All the terms used at this game are French: thus the punters having staked their money, the dealer says,— “*Votre jeu est il fait?*” Is your game made?

or, “*Votre jeu est il pret?*” Is your game ready? He then commences dealing, placing the first card with its face upwards, saying “*Noir*,” and continues dealing until the cards turned exceed thirty points, which he announces as *trente et un*, or whatever it may be.

Another parcel is then dealt for Rouge in a similar manner, and the punters win who had staked on that colour the points for which were thirty-one, or the nearest to it, which the dealer declares by saying, “*Rouge gagne*,” or “*rouge perde*.” These two parcels constitute what is called a *coup*. When the same number is dealt for each, the dealer says, “*Apres*,” which forms a refait, or doublet, by which neither party wins.

Hitherto it must be obvious, that the chances between the banker and the player are equal; but when the banker, having turned up *thirty-one* for *Noir*, deals the same number of points (31) for *Rouge*, he is intitled to half the amount of every stake on either colour.*

As the principle of this game requires that the number of points dealt for *Noir* or *Rouge* should, *at least*, amount to 31, a little reflection suggests to us, that the doctrine whereby the numerical value of the cards is determinable, precludes the

* The banker seldom takes the money, but removes it into the middle line on which colour the punters please; this is called *la premiere prison*. If they win the next coup, they win the whole; but in the event of a second doublet of *trente et un*, it is removed into the third line, or *la seconde prison*; the dealer has now won three-fourths of the money, and the next coup determines whether the player loses all his stake, or whether it is to be removed again into *la premiere prison*. The amount of the stakes is generally limited; but it may be exceeded by an agreement to that effect between the punter and the banker, in which case he announces his intention thus—“*Je vais à la banque*.”

points for Noir or Rouge exceeding 40, *at most*, in number, and that the point of 40 can be made only where the last card dealt out for the Noir or Rouge furnishes 10 points.—On the ground of this suggestion, we are enabled to establish, that the point of 40 can happen only where the last

card is..... 10

39	may occur	9 or 10
38	..... either 8, 9, 10	
37	..... 7, 8, 9, 10	
36	..... 6, 7, 8, 9, 10	
35	..... 5, 6, 7, 8, 9, 10	
34	..... 4, 5, 6, 7, 8, 9, 10	
33	..... 3, 4, 5, 6, 7, 8, 9, 10	
32	..... 2, 3, 4, 5, 6, 7, 8, 9, 10	

but that 31 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Now as effects are produced in ratio to the number of their causes, we see that of the points investigated, from 31 to 40 inclusive, some will happen more frequently than others; and hence, as the peculiarity of this game attaches the same numerical value to a king, to a queen, or a knave, as is incident to a ten usually so known, by adding three to the number of causes by which each point is producible as above, we are furnished with a fundamental rule, that where the point of

31	happens	(10 + 3) or 13 times,
32	will occur	(9 + 3) or 12 —
33	.....	(8 + 3) or 11 —
34	.....	(7 + 3) or 10 —
(A.) 35	.....	(6 + 3) or 9 —
36	.....	(5 + 3) or 8 —
37	.....	(4 + 3) or 7 —
38	.....	(3 + 3) or 6 —
39	.....	(2 + 3) or 5 —
40	.....	(1 + 3) or 4 —

Two of these points being necessary to constitute a *coup*, which may be *identical* in the numerical amount of Noir and Rouge, we find by multiplying the proportional times of the occurrences into themselves, that where the *refait* of

	31 and 31	happens	(13^2) or 169	times.
	32 and 32	will occur	(12^2) or 144	—
	33 and 33	.....	(11^2) or 121	—
	34 and 34	.....	(10^2) or 100	—
(B.)	35 and 35	.....	(9^2) or 81	—
	36 and 36	(8^2) or 64	—
	37 and 37	(7^2) or 49	—
	38 and 38	(6^2) or 36	—
	39 and 39	(5^2) or 25	—
	40 and 40	(4^2) or 16	—
				—

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And on the same principle of calculation, we deduce that the square of 85, the sum of the number of proportional occurrences illustrated in (A), will give the quantity of times in which all the events, identical, or differing in their results, will be produced in virtue of the number of causes previously shown to belong to each.

Thus, in (85^2) or 7225 coups, where the point of

	31 and 31	happens	(13^2) or 169	times.
	31 and 32	.....	(13×12) or 157	—
	31 and 33	.....	(13×11) or 143	—
	31 and 34	.....	(13×10) or 130	—
(C.)	31 and 35	.....	(13×9) or 117	—
	31 and 36	.....	(13×8) or 104	—
	31 and 37	.....	(13×7) or 91	—
	31 and 38	.....	(13×6) or 78	—
	31 and 39	.....	(13×5) or 65	—
	31 and 40	.....	(13×4) or 52	—

32 and 31	happens	(12 × 13) or 156 times.
32 and 32	.....	(12 ²) or 144 —
32 and 33	.....	(12 × 11) or 132 —
32 and 34	.....	(12 × 10) or 120 —
32 and 35	.....	(12 × 9) or 108 —
32 and 36	.....	(12 × 8) or 96 —
32 and 37	.....	(12 × 7) or 84 —
32 and 38	.....	(12 × 6) or 72 —
32 and 39	.....	(12 × 5) or 60 —
32 and 40	.....	(12 × 4) or 48 —
33 and 31	.....	(11 × 13) or 143 —
33 and 32	.....	(11 × 12) or 132 —
33 and 33	.....	(11 × 11) or 121 —
33 and 34	.....	(11 × 10) or 110 —
33 and 35	.....	(11 × 9) or 99 —
33 and 36	.....	(11 × 8) or 88 —
33 and 37	.....	(11 × 7) or 77 —
33 and 38	.....	(11 × 6) or 66 —
33 and 39	.....	(11 × 5) or 55 —
33 and 40	.....	(11 × 4) or 44 —
34 and 31	.....	(10 × 13) or 130 —
34 and 32	.....	(10 × 12) or 120 —
34 and 33	.....	(10 × 11) or 110 —
34 and 34	.....	(10 ²) or 100 —
34 and 35	.....	(10 × 9) or 90 —
34 and 36	.....	(10 × 8) or 80 —
34 and 37	.....	(10 × 7) or 70 —
34 and 38	.....	(10 × 6) or 60 —
34 and 39	.....	(10 × 5) or 50 —
34 and 40	.....	(10 × 4) or 40 —
35 and 31	.....	(9 × 13) or 117 —
35 and 32	.....	(9 × 12) or 108 —
35 and 33	.....	(9 × 11) or 99 —
35 and 34	.....	(9 × 10) or 90 —
35 and 35	.....	(9 × 9) or 81 —
35 and 36	.....	(9 × 8) or 72 —
35 and 37	.....	(9 × 7) or 63 —

ROUGE ET NOIR.

35 and 38	happens	(9 × 6) or	54 times.
35 and 39	.....	(9 × 5) or	45 —
35 and 40	.....	(9 × 4) or	36 —
36 and 31	.....	(8 × 13) or	104 —
36 and 32	.....	(8 × 12) or	96 —
36 and 33	.....	(8 × 11) or	88 —
36 and 34	.....	(8 × 10) or	80 —
36 and 35	.....	(8 × 9) or	72 —
36 and 36	.....	(8 ²) or	64 —
36 and 37	.....	(8 × 7) or	56 —
36 and 38	.....	(8 × 6) or	48 —
36 and 39	.....	(8 × 5) or	40 —
36 and 40	.....	(8 × 4) or	32 —
37 and 31	.....	(7 × 13) or	91 —
37 and 32	.....	(7 × 12) or	84 —
37 and 33	.....	(7 × 11) or	77 —
37 and 34	.....	(7 × 10) or	70 —
37 and 35	.....	(7 × 9) or	63 —
37 and 36	.....	(7 × 8) or	56 —
37 and 37	.....	(7 ²) or	49 —
37 and 38	.....	(7 × 6) or	42 —
37 and 39	.....	(7 × 5) or	35 —
37 and 40	.....	(7 × 4) or	28 —
38 and 31	.....	(6 × 13) or	78 —
38 and 32	.....	(6 × 12) or	72 —
38 and 33	.....	(6 × 11) or	66 —
38 and 34	.....	(6 × 10) or	60 —
38 and 35	.....	(6 × 9) or	54 —
38 and 36	.....	(6 × 8) or	48 —
38 and 37	.....	(6 × 7) or	42 —
38 and 38	.....	(6 ²) or	36 —
38 and 39	.....	(6 × 5) or	30 —
38 and 40	.....	(6 × 4) or	24 —
39 and 31	.....	(5 × 13) or	65 —
39 and 32	.....	(5 × 12) or	60 —
39 and 33	.....	(5 × 11) or	55 —
39 and 34	.....	(5 × 10) or	50 —

39 and 35	happens	(5 × 9) or 45 times.
39 and 36	.....	(5 × 8) or 40 —
39 and 37	.....	(5 × 7) or 35 —
39 and 38	.....	(5 × 6) or 30 —
39 and 39	.....	(5 ²) or 25 —
39 and 40	.....	(5 × 4) or 20 —
40 and 31	.....	(4 × 13) or 52 —
40 and 32	.....	(4 × 12) or 48 —
40 and 33	.....	(4 × 11) or 44 —
40 and 34	.....	(4 × 10) or 40 —
40 and 35	.....	(4 × 9) or 36 —
40 and 36	.....	(4 × 8) or 32 —
40 and 37	.....	(4 × 7) or 28 —
40 and 38	.....	(4 × 6) or 24 —
40 and 39	.....	(4 × 5) or 20 —
40 and 40	.....	(4 ²) or 16 —

In these 7225 coups there are to be found, according to (B), 805 *refaits*, which amount to $\left(\frac{7225 - 805}{805}\right)$ one refait in every 7 or 8 coups, or about 7 in two tailles, calculating each taille to average 29 coups.

Now from formula (C) we ascertain the chances of the occurrence of any refait. Thus, the odds against the refait of

40 are (7225— 16) :	16, or about 450 to 1
39 are (7225— 25) :	25 290 to 1
38 are (7225— 36) :	36 199 to 1
37 are (7225— 49) :	49 146 to 1
36 are (7225— 64) :	64 111 to 1
35 are (7225— 81) :	81 89 to 1
34 are (7225— 100) :	100 71 to 1
33 are (7225— 121) :	121 58 to 1
32 are (7225— 144) :	144 49 to 1
31 are (7225— 169) :	169 41 to 1

And thus we find that an apres or refait of 31 must happen in the course of 41 or 42 actual coups, in which, however, are included those other refaits which are null and void.

Consequently we deduce that the refait of 31 occurs in every $(\frac{7225 - 805}{169})$, or 38 or 39 material coups, or twice in every three tailles, where each taille averages from 29 to 31 coups. An immaterial or material refait happening once in each 7 or 8 coups, thus: $\frac{7225 - 805}{805}$.

N.B. The advantage, therefore, accruing to the banker over the player from the chance of the refait of 31 (whereby all parties forfeit half their stakes) is (as $38 : \frac{1}{2} :: 100 : (\frac{100 - \frac{1}{2}}{38})$), a *trifle less than* $1\frac{1}{2}$ per cent., or (as $100 : 1\frac{1}{2} :: 20 : (\frac{20 \cdot 1\frac{1}{3}}{100})$) about $3\frac{1}{3}$ d. per 20s. on all the monies staked.

After the cards for Noir have been dealt, the odds against or in favour of the player who has staked upon Rouge, varying according to the numerical amount declared for the adverse chance, may be estimated by reference to (A).

With respect to the case where the first point is 31, the calculation is only of comparative loss, it being evident that the player cannot win or save more than half the amount of his venture. Consequently, the odds are $(85 - 13) : 13$, or $72 : 13$; *viz.* $5\frac{7}{13} : 1$, that the player do not recover half his stake.

By the same process we find the odds in each case respectively to be,

1stly, $85 - (13 + 12) : 13$, or $60 : 13$. 2dly, $85 - (13 + 12) : (13 + 12)$, or $60 : 25$.

Viz. where the point is 32, it is $4\frac{8}{3} : 1$, that he does not win, and $2\frac{2}{3} : 1$ that he loses.

1stly, $85 - (13 + 12 + 11) : (13 + 12)$, or $49 : 25$. 2dly, $85 - (13 + 12 + 11) : (13 + 12 + 11)$, or $49 : 36$.

Viz. where the point is 33, it is $1\frac{2}{5} : 1$, that he do not win; and $1\frac{1}{3} : 1$ that he lose.

1stly, $85 - (13 + 12 + 11 + 10) : (13 + 12 + 11)$, or $39 : 36$. 2dly, $(13 + 12 + 11 + 10) : 85 - (13 + 12 + 11 + 10)$, or $46 : 39$.

Viz. where the point is 34, it is $1\frac{1}{7} : 1$, that he do not win; and $1\frac{7}{35} : 1$ that he draw or win.

1stly, $(13 + 12 + 11 + 10 + 9) : 85 - (13 + 12 + 11 + 10 + 9)$, or $55 : 30$. 2dly, $(13 + 12 + 11 + 10) : 85 - (13 + 12 + 11 + 10 + 9)$, or $46 : 30$.

Viz. where the point is 35, it is $1\frac{5}{6} : 1$, that he do not lose, and $1\frac{8}{5} : 1$ that he win.

1stly, $(13 + 12 + 11 + 10 + 9 + 8) : 85 - (13 + 12 + 11 + 10 + 9 + 8)$, or $63 : 22$. 2dly, $(13 + 12 + 11 + 10 + 9) : 85 - (13 + 12 + 11 + 10 + 9 + 8)$, or $55 : 22$.

Viz. where the point is 36, it is $2\frac{9}{7} : 1$, that he do not lose, and $5 : 2$, that he win.

1stly, $(13 + 12 + 11 + 10 + 9 + 8 + 7) : 85 - (13 + 12 + 11 + 10 + 9 + 8 + 7)$, or $70 : 15$. 2dly, $(13 + 12 + 11 + 10 + 9 + 8) : 85 - (13 + 12 + 11 + 10 + 9 + 8 + 7)$, or $63 : 15$.

Viz. where the point is 37, it is $4\frac{2}{3} : 1$, that he do not lose—and $4\frac{1}{5} : 1$, that he win.

1stly, $(13 + 12 + 11 + 10 + 9 + 8 + 7 + 6) : 85 - (12 + 11 + 10 + 9 + 8 + 7 + 6)$, or $76 : 9$. 2dly, $(13 + 12 + 11 + 10 + 9 + 8 + 7) : 85 - (13 + 12 + 11 + 10 + 9 + 8 + 7 + 6)$, or $70 : 9$.

Viz. where the point is 38, it is $8\frac{4}{9} : 1$, that he do not lose—and $7\frac{7}{9} : 1$, that he win.

1stly, $(13+12+11+10+9+8+7+6 \times 5) : 85 - 13+12+11+10+9+8+7+6+5$, or $81 : 4$.
 (2dly, $(13+12+11+10+9+8+7+6) : 85 - (13+12+11+10+9+8+7+6+5)$, or $76 : 4$.

Viz. where the point is 39, it is $20\frac{1}{4} : 1$, that he do not lose—and $19 : 1$, that he win.

And, where the point is 40, it being evident that the player cannot lose, we find, $(13+12+11+10+9+8+7+6+5) : 85 - (13+12+11+10+9+8+7+6+5+4)$, or $81 : 1$, that he win.

From these data may be deduced, as a matter of curiosity, the just proportions which the banker may give or receive by composition for the monies ventured upon the knowledge of the first point.

Of course, the compositions here spoken of are only to be made from the proportions established above, as long as the cards for *Noir* are alone played; for were any cards for the opposite colour already appearing, the situation of the game would be altered. And this leads us to observe, that the last card of the talon or pack ought not to count, because it is known; and as we may speculate on the last coup, the equality of the game would be destroyed from this circumstance, that whenever the last coup finishes with the last card, it is almost always probable that *Rouge* will win; for by reference to the calculation in page 1, it is evident that there are a greater number of last cards capable of furnishing a low than a high coup.

From the observations above it must be obvious, that there exists no means for winning with certainty, or even for diminishing the slightest portion of the banker's advantage. In the long run, events are balanced, and the banker having more chances in his favour than the player has,

the former must necessarily win. Thus, if a player has been fortunate enough to win a considerable sum on one coup, it will dwindle away in detail ; and, *vice versa*, what he had won in detail, à la martingale, he would lose *en gros*; for this reason—that of whatever number of coups the martingale may be composed, it will break in a proportion equal to what it may produce.

The number of combinations that may be composed in a series of 26 coups is immense. There are no less than 67108864 different ways in which a taille consisting of 26 coups may happen.

Thus, whatever way we may determine on, there are (67108864—1) other ways, all equally possible. In this number there is but one chance for Noir winning, and one chance for Rouge; one that there may be no interruption commencing with *Noir*, and one that there may be no interruption commencing with *Rouge*. It is possible that by dint of tailles these events may sometimes occur; but the period in which we may reasonably look for them is too long; for supposing 10 tailles per diem, it would require a space of 18500 years to see them once happen.

If a player has had the good fortune to double, triple, or quadruple his martingale, we must not imagine that his system of play is better than another, since it is in reality but the same degree of luck as the winning of a paroli et sept et le va, seven times the original stake.

Every progression comes to the same thing; and that which increases the most is nothing more than deeper play. He who imagines that he is only staking a sovereign because the first coup of his martingale commenced with that sum, is in reality playing more deeply than he conceives;

for instance, if the martingale has run 6 coups, and that it amounts to 120 sovereigns every coup, one with another, will amount to $5\frac{1}{2}$ sovs.; so that if without doubling he had played each coup $5\frac{1}{2}$ sovereigns, it would have come to the same thing, and in the long run, he would lose as much one way as the other. This does not, however, exclude the possibility of winning *momentarily*, because in a small number of coups the advantage of the banker is comparatively trifling, but in the long run, the player will pay *dearly* for his amusement; and we hope that the mathematical analysis which we have given of this game, which holds the first rank in the gaming-houses of Europe, will convince the most sceptical of our readers of the impossibility of combining any system for winning, and put them upon their guard against those designing knaves ever on the alert to entrap the unwary by the glittering temptation of a system which they impudently assert requires but the risk of a small capital to gain millions.

EXPLANATION OF THE TERMS USED AT ROUGE ET NOIR.

BANQUIER. The dealer.

FAUSSE TAILLE. Is when the dealer commits a fault, which subjects him to double all the money staked.

MARTINGALE. A mode of play which consists in staking double the amount of the money lost.

PAROLI. Double the sum staked the first time.

REFAIT DE TRENTÉ ET UN. A coup by which the banker wins one half the money staked, and is effected by dealing 31 for each colour.

REFAIT. Is when the banker deals the same sum for both colours from 32 to 40.

SEPT ET LE VA. Seven times the amount of the sum first staked.

TAILLE. Is made when the banker has dealt out all the cards.

FIGURE. The name given to the kings, queens, and knaves.

POINT. The number which results from the sums of the cards dealt by the banker.

NOIR. The colour for which the first points are dealt by the banker.

ROUGE. The colour for which the banker deals the points after those for black.

BANKER. The dealer.

PUNTER. Those who play against the banker.

LA ROULETTE.

THE form of the table used for this game is an oblong square, covered with green cloth, in the centre of which there is a round cavity, around the sides of which, equidistant one from the other, are ranged several bands of copper, which commencing at the top, descend just to the extremity of the machine. In the centre of this cavity, which is moveable, is formed a circular bottom, containing 38 holes, to which the copper bands are attached, and upon which are painted, alternately in black and red, 36 numbers, from 1 a 36 a zero (0) and a double zero (00).

Impair. Manque. Rouge.			Pair. Passe. Noir.		
0	00		0	00	
36			36		
35			33		
32			31		
30			29		
28			27		
26			25		
24			23		
21			20		
18			17		
16			16		
14			13		
12			11		
10			9		
7			8		
6			5		
4			3		
1			2		
32	30	15	16	17	25
20	18	1	21	22	23
14	13	2	19	27	29
31	33	3	35	36	34
24	28	4	26	25	22
10	12	5	11	13	17
1	3	6	8	7	14
28	30	21	22	23	24
25	23	16	17	18	19
22	20	13	14	15	16
19	17	10	11	12	13
16	14	7	8	9	10
13	11	4	5	6	7
10	8	1	2	3	4
7	5				
4	2				
1					

A Roulette Table.

In the middle is a copper moulinet, surmounted by a cross, which serves to impress the bottom with a rotatory motion.

There is a banker, or rather several tailleurs—the number of players is unlimited.

One of the tailleurs sets the machine in motion, throwing at the same instant an ivory ball into the concavity in an opposite direction to the movement he has given to the moveable bottom. The ball makes several revolutions with great velocity, until, its momentum being exhausted, it falls into one of the 38 holes formed by the copper bands. It is the hole into which the ball falls that determines the gain or the loss of the numerous chances which this game presents.

To the right and left of the moulinet are figured on the green cloth, for the accommodation of the players, the 36 numbers and the zeros, simple and double. The other chances are also designated on the green cloth divergent from its centre; on one side, *l'impair*, *la manque*, and *rouge*; and on the opposite, *pair*, *passe*, and *noir*. The *impair* wins when the ball enters a hole numbered *impair*; the *manque*, when it enters a hole numbered 18, and all those under that number; the *rouge* wins when the ball enters a hole of which the number is red, and *vice versa*.

La Roulette affords seven chances; comprising that of the numbers, and the latter chance divides itself into many others, of which we shall give a brief detail.

The player stakes upon the chances, he may select any sum he pleases, that is to say, from two francs, the *minimum* stake admitted, to 12,000, the *maximum*, unless in the like cases of which we have spoken in the game of Rouge et Noir.

The player who puts his money on *one* of the

numbers or the zeros painted on the green cloth, receives 35 times the amount of his stake should the ball fall into the corresponding number or zero in the interior of the roulette.

The player who plays on the numbers, may play the first *twelve*, the middle *twelve*, and the last *twelve*. If the ball enters one of the twelve numbers corresponding to those on the green cloth on which the player has staked his money, he is paid three times the amount of his stake.

To play the *Colonnes*, the gamester stakes his money in the square placed at the foot of each column marked on the green cloth; and in the event of the ball entering one of the holes corresponding to the numbers of the column, he wins three times his stake.

Again, he may equally at his pleasure play 2, 3, 4, 6 numbers, and he wins and loses, in the same proportion, eighteen times his stake for two numbers, twelve times for *three numbers*, nine times for four numbers, and six times for *six numbers*, and the rest in proportion. The player who may have put his money on one or the other of the six chances, wins double his stake if the chance arise. If, then, a ball enter a hole, of which the number is 36, the banker pays double all the following chances, *passe*, *pair*, and *rouge*, and likewise thirty-five times the amount of the sum staked upon the number **THIRTY-SIX**, and of course draws to the bank all the chances placed on the other chances.

If the ball enter a hole numbered 18 *noir*, the banker pays the player double the amount of the stakes placed on the following chances, *la manque*, *l'impair*, and *noir*, and thirty-five times the amount of the stake placed upon the number 17, and draws to the banker all the money placed on the other chances.

Of all the games of chance at present in vogue,

Roulette is unquestionably the most disadvantageous to the player, for the bank's mean chance of winning is—

$\frac{3}{8}$ or nearly 8 per cent. on a single number.

$\frac{2}{8}$ or nearly $6\frac{1}{3}$ per cent. on either of the 12 numbers or the colonnes.

$\frac{1}{8}$ or nearly 5 per cent. upon two numbers.

$\frac{3}{8}$ or nearly $6\frac{1}{3}$ per cent. upon three numbers.

$\frac{2}{8}$ or nearly 7 per cent. upon four numbers.

$\frac{3}{8}$ or nearly 7 per cent. upon six numbers.

$\frac{1}{8}$ or nearly 5 per cent. upon the passe, pair, manque, impair, rouge et noir.

And hence it is against the player upon the

1st. chance	37	to 1
2d. do.	13	to 6
3d. do.	18	to 1
4th. do.	$11\frac{2}{3}$	to 1
5th. do.	17	to 2
6th. do.	16	to 3
7th. do.	10	to 9

When, however, the numbers are all filled up, as the bank only pays the winner thirty-five times his stake, it clears *three*; thus, supposing thirty-eight sovereigns to be staked, and that the ball is thrown twice in a minute, the gain of the bank, without incurring the slightest risk, would be *six* sovereigns per minute, or *three hundred and sixty* per hour. Although, in whatever way you play, the chances are always in favour of the bank, still its risk varies in ratio to the number of chances which are not filled up; for instance, were only ten numbers filled up, and that the ball were to enter one of them, the bank would in that case lose *thirty-four*, and only win *eight*; whereas, when all the numbers are filled up, it wins three without risking a farthing.

FRENCH LOTTERY.

THE Royal Lottery of France is composed of 90 numbers, five of which, separately drawn in successive sorties, constitute its decision, and determine the fortune of all adventurers.

There are seven different methods whereby money may be staked, *viz.* on either of the following five simple chances, or on either of the two chances determined investigated below.

1st. *Par Extrait*—on a single number; which occurring among the five numbers drawn, entitles the player to 15 times the amount of his stake.

2d. *Par Extrait determiné*—on a single number; the particular sortie in which it will be drawn being also determined. Here, the chosen number occurring in the order indicated, the player receives 70 times the amount of his stake.

3d. *Par Ambe*—on two numbers; both which occurring among the five numbers drawn entitle the player to 270 times the amount of his stake.

4th. *Par Ambe determiné*—on two numbers; the particular sortie in which each will appear being also determined. Here, the two chosen numbers, each occurring in the order respectively indicated to each, entitle the player to 5100 times the value of his stake.

5th. *Par Terne*—on three numbers: all which occurring among the five numbers drawn, entitle the player to 5500 times the amount of his stake.

6th. *Par Quaterne*—on four numbers; all which occurring among the five numbers drawn, entitle the player to 75000 times the amount of his stake.

And 7th. *Par Quine*—on five numbers; which being all drawn, entitled the player to 1000000 times the value of his venture; but this last method has been abolished.

6. Lot du 9 Vendémiaire an six. <i>Tirage de LILLE.</i>	Loterie Royale de France. <i>T^{re}e. de</i>	183	<i>B^{au}.</i> C O M M U N E	<i>Enr^{nt}.</i>
		d		
Le porteur a placé pour le <i>TIRAGE du</i>				<i>sur les N^{os}. suivans ; Savoir :</i>
<i>Extrait....à</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>L'Extrait simple sera payé 15</i>
<i>Ambe à</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>fois la mise ;</i>
<i>Terne à</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>L'Ambe simple, 270 fois ;</i>
<i>Quaterne .. à</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>Le Terne, 5,500 fois ;</i>
<i>Extr. dét. à</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>Le Quaterne, 75,000 fois ;</i>
<i>Ambe dét. à</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>L'Extrait détermine, 70 fois ;</i>
				<i>L'Ambe détermine, 5,100 fois.</i>
			<i>Reçu</i>	

Let us now calculate the respective chances of the player, and the bank in each case.

(a) Since from the ninety numbers, of which the lottery consists, five numbers are drawn, the chance of any particular number occurring must be $\frac{5}{90}$. The probability of any specified number being drawn being $\frac{1}{18}$, the chances against it must be $\frac{17}{18}$.

Now, as if the particular number appear, the player (receiving 15 times) wins 14 times the value of his venture, forfeiting merely the stake hazarded if the number do not occur, we find his chance of gain to be $\frac{1}{18} 14 - \frac{1}{18} 1 = -\frac{1}{18}$ of his stake.

(b) Where the particular sortie in which a selected number shall appear is determined, the chance in favour of its being drawn is $\frac{1}{90}$, and the probability of its not appearing must, consequently, be $\frac{89}{90}$.

Now, as in the event of success in this case, the adventurer wins 69 times the value of his stake, which he forfeits if his chance fail, we find his prospect of gain to be $\frac{1}{90} 69 - \frac{89}{90} 1 = -\frac{2}{5}$ of his stake.

(c) The number of combinations, two and two, of ninety numbers, is $\frac{90 \cdot 89}{1 \cdot 2} = 4005$, and the number of combinations, two and two, of five numbers, is $\frac{5 \cdot 4}{1 \cdot 2} = 10$; the probability of a specified *ambe* occurring will, therefore, be $\frac{1}{4005}$, and that it will not be drawn, $\frac{4004}{4005}$.

Here, as the player will in the former event win 269 times the amount of his stake, his chance of gain will be $\frac{1}{4005} 269 - \frac{4004}{4005} 1 = -\frac{2}{5}$ of his stake.

(d) In the 4th case mentioned, the number of combinations, two and two, is double what it is in the preceding case, since either of the two num-

bers placed, the first or the second, forms a separate combination; and it is evident, inasmuch as the order in which each number is to be drawn is determined, that one only of these combinations will satisfy the chance chosen. Hence, the probability of an *ambe déterminé* occurring will be $(\frac{1}{90 \cdot 89} \text{ or})$

$\frac{1}{80 \cdot 1 \cdot 90}$, and that it will not be drawn, $\frac{89 \cdot 90}{80 \cdot 1 \cdot 90}$.

If the player be successful in the hazard of this chance, he wins 5099 times his venture; and, consequently, we find that his probability of gain is $\frac{5099}{80 \cdot 1 \cdot 90} = \frac{89 \cdot 90}{80 \cdot 1 \cdot 90} = - \frac{2}{3}$ of his stake.

(e) The number of combinations, three and three, of ninety numbers, is $\frac{90 \cdot 89 \cdot 88}{1 \cdot 2 \cdot 3} = 117480$, and the number of combinations, three and three, of five numbers, is $\frac{5 \cdot 4 \cdot 3}{1 \cdot 2 \cdot 3} = 10$; the probability of a particular *terne* being drawn will, therefore, be $\frac{1}{117480}$, and that it will not occur, $\frac{117470}{117480}$.

In a *terne*, the successful player wins 5499 times the value of his stake; his chance of gain is, therefore, found to be $\frac{5499}{117480} = \frac{11747}{117480} = - \frac{1}{200}$.

(f) The number of combinations, four and four, of ninety numbers, is $\frac{90 \cdot 89 \cdot 88 \cdot 87}{1 \cdot 2 \cdot 3 \cdot 4} = 2555190$; and the number of combinations, four and four, of five numbers, is $\frac{5 \cdot 4 \cdot 3 \cdot 2}{1 \cdot 2 \cdot 3 \cdot 4} = 5$; the probability of a particular *quaterne* occurring will, therefore, be $\frac{5}{2555190}$, and the chance that it does not come up, $\frac{2555185}{2555190}$.

As the prize paid in this case amounts to 75499 times the value of the stake played, the player's probability of gain is, $\frac{75499}{2555190} = \frac{511037}{2555190} = - \frac{218749}{2555190}$.

(g) The number of combinations, five and five, of ninety numbers, is $\frac{90 \cdot 89 \cdot 88 \cdot 87 \cdot 86}{1 \cdot 2 \cdot 3 \cdot 4 \cdot 5} = 43949268$,

and the number of similar combinations in five numbers is the unit,

The chance of a particular *quine* being drawn is, therefore, $\frac{1}{43949268}$; and that it will not occur, $\frac{43949267}{43949268}$.

Since the player will in the former event win 999999 times the amount of his stake, his chance of gain is $\frac{1}{43949268} \times 999999 = \frac{13949267}{43949268} = \frac{13949268}{43949268}$, or rather more than $\frac{1}{43}$.

From the foregoing calculations, we are enabled to deduce that the bank's mean chance of winning is,

1st.	$\frac{1}{6}$	of all sums staked par Extrait.
2d.	$\frac{2}{3}$	..... par Extrait determ.
3d.	$\frac{3}{8}$	..... par Ambe.
4th.	$\frac{2}{801}$	..... par Ambe determ.
5th.	$\frac{1}{262}$	..... par Terne.
6th.	$\frac{2}{55519}$	..... par Quaterne.
7th.	$\frac{1}{43949268}$	..... par Quine.

And that the chance against the individual player in each is,

17	to 1 agst the player	par Extrait.
89	to 1	..... par Extr. determ.
399½	to 1	..... par Ambe.
8009	to 1	..... par Ambe determ.
11747	to 1	..... par Terne.
511037	to 1	..... par Quaterne.
43949267	to 1	..... par Quine.

Thus, to give those of our readers who are unaccustomed to calculations some idea of the probability of winning the last two chances investigated, we shall just observe that the probability of gaining a *quaterne* is less than the chance a man of fifty years of age has of dying of apoplexy within an hour. And that the chance of winning a *quine* is less than the chance of seeing two per-

sons in eight, of fifty years of age, carried off by apoplexy in the course of the day.

He who would purchase a *quaterne* in every lottery, would have an equal chance for the coming up or not of his ticket, but after 376288 drawings, or more than 15678 years. And again, the chance of them who would take a *quine*, would be after 30103000 drawings, or 1254292 years. If we suppose the lottery to be created at the beginning of the world, there would be more than 99668 to bet against 862, or 300 to 1, that a particular quine would not yet have been drawn.

There do not, and in fact cannot, exist any real means of playing with advantage at any game of chance which is in itself disadvantageous. It is only the avidity of gain carried to an excess to master the free exercise of reason, the vulgar prejudice upon the probability of certain numbers being drawn which have not appeared for a considerable time, or in fact, other superstitious ideas more common than they ought to be in an enlightened age like the present, which inflict mankind with a species of madness, rendering them blind to the risk their fortunes and their happiness incur at these curious games.

The most powerful antidote for this furor, is to extend as much as possible the knowledge of the calculations of chances, and no means should be neglected to render this acquirement popular.

But although the Lottery of France, considered mathematically, presents at the first glance an immense advantage in favour of the Bank, still, in order to pronounce an equitable judgment upon it, due regard must be paid to some particular considerations. It is certain, that if the lottery were full at every drawing, the gain of the bank would be sure, and so considerable, that it would

justly merit the severest prohibitory measures on the part of the French government. But this is not the case, nor is it one that comes within the range of probability, seeing that there are four different lotteries in France, *viz.* Paris Lille, Strasbourg, and Bourdeaux, each of which are drawn three times in a month. Accordingly, it may so happen that considerable sums are staked upon the *terne*, while comparatively little or nothing has been staked upon the other chances. In the event of the first coming up, the sum the bank would have to pay would be immense; thus, although the chances in favour of the bank, it must be admitted, are very great, it nevertheless runs a considerable risk, and it is in compensation of this risk that it appears equitable to accord it some advantage. To determine the just measure of this compensation is, however, impossible; for although, mathematically speaking, it is the same thing to play one million against one hundred thousand francs, as one thousand francs against one hundred, yet it is not the same in a moral sense, because loss in the first instance would entail absolute ruin upon the player; while, in the second, it would be but comparatively trifling to a person of handsome fortune. It is under this point of view that we must consider the relative position of the public and the lottery, the former of whom plays but a limited stake, while that of the latter may be said to be unlimited. And although great as are the chances shewn by our analysis in favour of the bank, still it is on record that a lottery of this kind was once broken in Italy; while in France, the father of the present king, the celebrated Phillip Egalité, actually won a *quine*. It must, however, be remarked, that this extraordinary piece of good fortune, it is

now generally presumed, was due to an *escroquerie*, achieved by the means of carrier pigeons, as the same numbers were purchased or staked upon in different parts of the kingdom at the same time. The sum gained on this occasion was so enormous, that the contractors were obliged to enter into a composition with the royal winner. It is since that event that the quine has been abolished. The quaterne is now the highest prize.

The French government derive a considerable revenue from the Lottery, who, besides, look upon it as a powerful engine of domestic policy, by amusing the people, who, for a few sous, can purchase the hope of winning millions, and who thus dream away their existence in the pursuit of a shadow.

F A R O.

FARO, Pharo, Pharaoh, or Pharaon, is very similar to Basset, a game formerly much in vogue.

RULES OF THE GAME.

The banker turns up the cards from a complete pack, deliberately, one by one, laying them alternately, first to his right for the bank, and then to his left hand for the punter, till the whole are dealt out.

The punter may, at his option, set any number of stakes, agreeable to the sum limited, upon one or more cards chosen out of his livret from the ace, to the king inclusive, either previous to dealing the cards, or after any quantity of coups are made, or he may masque his bets, or change his cards whenever he pleases, or finally decline punt-

ing, except an event is unsettled when not above eight cards are undealt.

The banker wins when the card equal in points to that on which the stake is set turns up on his right hand, but loses when it is dealt to the left.

The punter loses half the stake when his card comes up twice in the same coup.

The last card neither wins nor loses.

The last card but one is called hoely, and used to form part of the banker's gain; but now is frequently given up, and generally so in the last deal.

When, by accident or design, the pack happens to contain more or less than fifty-two cards, or should the last coup be found deficient, owing to any misdeal, however arising, whether discovered at the end or during the game, the bank must then pay every stake depending at the period when the error is detected, and the same payment must also be made if the cards be thrown up.

The dealer should hold the cards close in his hand, and always be prepared to inform any punter how many remain.

The first card is never valid till the second is dealt.

No person but the dealer or croupier should ever meddle with the cards, unless to cut them.

A paroli, &c., may be purchased by paying a sum equivalent to the stake.

METHOD OF PLAY.

THE tailleur and croupier sit opposite each other at a large oval table covered with a green cloth, on which is a line marked by coloured tape, or a wooden rim about an inch high, and eight inches from the edge of the table, for the purpose

of separating the cards punted on from the others. Money is placed either loose in a well, or done up in rouleaus. The tailleur is to deal, while the croupier pays and receives, guards against errors, and shuffles another pack of cards.

The game may be played by any number of persons, each punter being furnished with a livret, from which having chosen a card or cards, and placed the same on the table, just within the line, he puts the stake either thereon, or upon other cards placed face downwards at the head of those betted on. The stakes are answered by the banker, who usually limits the sums according to his capital; and at public tables has generally two or more croupiers. Then the dealer, having previously counted and shuffled the cards, and had them cut by a punter, should hold the pack tight in his hand, and show the bottom card as a caution to avoid punting on it near the conclusion of the game; and to prevent mistakes, a similar card, with the corners cut off, is usually laid in the middle of the table. He next says play, and proceeds to deal slowly, first to the right, and then to the left, mentioning every card as he goes on, and stopping between each two cards, while the croup settles the event.

When a punter gains, he may either take his money or paroli; should he win a second time he may play sept and le va; should he again prove successful, he can paroli for quinze and le va; afterwards for trente and le va; and, finally soixante and le va, which is the highest chance in the game. Should the punter not like to venture so boldly, he may make a paix or point: afterwards a double or treble paix, &c. or a single, double, or treble paix-paroli. When doublets are dealt, the punter may either pay or make a pli.

A reckoning may be kept of the number of times each card is dealt, by properly placing a livret and bending the corners of similar cards, one way for the punter, another way for the dealer.

TERMS USED AT FARO.

BANKER; the person who keeps the table.

COCKING. See *Paroli*.

; *the Stake*.

; *A Stroke or Pull*. Any two cards dealt alternately to the right and left.

; *Croup*. An assistant to the dealer.

. Is when the punter's card is turned up twice in the same coup, then the bank wins half the stake. A single paroli must be taken down; but should there be several, only one retires.

; *A certainty*. Signifies the last card but one, the chance of which the banker claims, and may refuse to let any punter withdraw a card when eight or less remain to be dealt.

; *A small Book*. A suit of thirteen cards, with four others called **, viz. one, named the little figure, has a blue cross on each side, and represents ace, deuce, tray; another, yellow on both sides, styled the yellow figure, signifies, four, five, six; a third, with a black lozenge in the centre, named the black figure, stands for seven, eight, nine, ten; and a red card, called the great or red figure, for knave, queen, king; these figures are useful for those who punt on several cards at once.**

: *One for the other*. Means a drawn game, and is said when two of the punter's cards are dealt in the same coup.

. Signifies turning a card, or placing another face downwards, during any number of

coups, on that upon which the punter has staked, and which he afterwards may display at pleasure.

OPPOSE; *The Opposite Game*. Is reversing the game, and having the cards on the right for the punter, and those on the left for the dealer.

PAIX; *Peace*. Equivalent to double or quits; is when the punter having won does not choose to paroli and risk his stake, but bends or makes a bridge of his card, signifying that he ventures his gains only. A double paix is, when the punter having won twice, bends two cards one over the other. Treble paix, thrice, &c. A paix may follow a sept, quinze, or trente, &c.

PAIX-PAROLI. Is when a punter having gained a paroli, wishes then to play double or quits, and save his original stake, which he signifies by doubling a card after making his first paroli; double-paix-paroli succeeds to winning a paix-paroli: treble-paix-paroli follows double, &c.

PAROLI or **PAROLET**; *Double*. Sometimes called *Cocking*, is when a punter, being fortunate, chooses to venture both his stake and gains, which he intimates by bending a corner of his card upwards.

PLI; *Bending*. Is used when a punter, having lost half his stake by a doublet, bends a card in the middle, and setting it up with the points and foot towards the dealer, signifies thereby a desire either of recovering the moiety, or of losing all.

PONT. *A Bridge*. The same as *Paix*.

PONTE or **PUNT**; *A point*. The punter or player.

QUINTZE & LE VA; *Fifteen and it goes*. Is when the punter having won a sept, &c., bends the third corner of the card, and ventures fifteen times his stake.

SEPT & LE VA; *Seven, &c.* Succeeds the gain-

ing of a paroli, by which the punter being entitled to thrice his stake, risks the whole again, and, bending his card a second time, tries to win seven-fold.

SOIXANTE & LE VA; *Sixty-three, &c.* Is when the player having obtained a trente, ventures all once more, which is signified by making a fifth paroli, either on another card, if he should have parolied on one only before, or by breaking the side of that one which contains four, to pursue his luck in the next deal.

TAILLEUR; *The Dealer.*, Generally the banker.

TRENTE & LE VA; *One and Thirty.* Follows a quintze, &c., when the punter again tries his luck, and makes a fourth paroli.

ODDS AT THE GAME OF FARO.

THE chance of doublets vary according to the number of similar cards remaining among those undealt.

The odds against the punter increase with every coup that is dealt.

When twenty cards remain in hand, and the punter's card but once in it, the banker's gain is 5 per cent.

When the punter's card is twice in twenty, the banker's gain is about the 34th part of the stake.

When the punter's card is thrice in twenty, the banker's gain is about 4 per cent.

When the punter's card is four times in twenty, the banker's gain is nearly the 18th part of the stake.

When only eight cards remain, it is 5 to 3 in favour of the bank: when but six are left, it is 2 to 1; and when no more than four, it is 3 to 1.

A TABLE FOR FARO,

Whereby the several advantages of the Banker, in whatever circumstances he may happen to be, are seen sufficiently near at the first view.

Number of Cards in the Stock.	The Number of Times the Punter's Card is contained in the Stock,			
	1	2	3	4
52	**	**	**	50
50	**	94	65	48
48	48	90	62	46
46	46	86	60	44
44	44	82	57	42
42	42	78	54	40
40	40	74	58	38
38	38	70	49	36
36	36	66	46	34
34	34	62	44	32
32	32	58	41	30
30	30	54	38	28
28	28	50	36	26
26	26	46	33	24
24	24	42	30	22
22	22	38	28	20
20	20	34	25	18
18	18	30	22	16
16	16	26	20	14
14	14	22	17	12
12	12	18	14	10
10	10	14	12	8
8	8	11	9	6

USE OF THE FOREGOING TABLE.

I. To find the gain of the banker when there are thirty cards remaining in the stock, and the punter's card twice in it.—In the first column seek for the number answering to 30, the number of cards remaining in the stock ; over against it, and under 2, at the head of the table, you will find 54, which shows that the banker's gain is the 54th part of the stake.

II. To find the gain of the banker when but ten cards are remaining in the stock, and the punter's cards thrice in it.—Against 10, the number of cards, in the first column, and under number 3, you will find 12, which denotes that the banker's gain is the 12th part of the stake.

III. To find the banker's profit when the punter's cards remain twice in twenty-two.—In the first column find 22, the number of cards over against it under figure 2, at the head of the table, you find 38, which shows that the gain is one 38th part of the stake.

IV. To find the banker's gain when eight cards remain, and the punter's card thrice among them.—In the first column seek for 8, on a line with which under the 3 stands the figure 9, denoting the profits to be 1-9th, or 2s. 4d. in the guinea.

COROLLARY 1.—From the table it appears, that the fewer cards there are in the stock, the greater is the gain of the banker.

COROLLARY 2.—The least gain of the banker under the same circumstance is, when the punter's card is but twice in hand, the next greater when three times, still greater when but once, and the greatest of all when four times. The profit of the banker is 3 per cent. upon all the

sums adventured, supposing the punters to stop when only six cards remain, but with hocky it is full 5 per cent.

E O.

AN EO table is circular in form, but of no exact dimensions, though in general about four feet in diameter. The extreme circumference is a kind of counter or *depôt*, for the stakes, marked all round with the letters E and O ; on which each adventurer places money according to his inclination. The interior part of the table consists, first, of a kind of gallery, or rolling-place, for the ball, which, with the outward parts, above called *depôt* or counter, is stationary or fixed. The most interior part moves upon an axis or pivot, and is turned about with handles, while the ball is set in motion round the gallery. This part is generally divided into 40 niches or interstices, 20 of which are marked with the letter E, and the other twenty with the letter O. The lodging of the ball in any of the niches, distinguished by those letters, determines the wager. The proprietors of the tables have two bar holes, and are obliged to take all bets offered either for E or O ; but if the ball fall into either of the bar holes, they win all the bets upon the opposite letter, and do not pay to that in which it falls ; an advantage equivalent to 2½ per cent. on all the money staked.

COMMERCE.

Or this game there are two distinct methods of playing, the new and the old mode. The new way is played by any number of persons, from three to twelve, with a complete pack of 52 cards, bearing the same import as at whist, only the ace is reckoned as eleven. Every player has a certain quantity of counters, on which a fixed value is put, and each, at every fresh deal, puts down one for the stake. Sometimes the game is continued, or not finished, till one of the players has lost all the counters given at the commencement; but in order to prevent it from being spun out to an unpleasant length, or concluded too soon, it is often customary to fix the duration to a determinate number of tours, or times, so that the whole party shall deal once each completely round.

After determining the deal, the dealer, styled also the banker, shuffles the pack, which is to be cut by the left-hand player; then three cards, either altogether or one by one, at the dealer's pleasure, are given to each person, beginning on the right hand, but none are to be turned up. If the pack prove false, or the deal wrong, or should there be a faced card, there must be a fresh deal. There are three degrees or ranks in this game. The first, which takes place of all others, is what is called the tricon, or three cards of the same denomination, similar to pair royal at cribbage; the next in rank is the sequence, or three following cards of the same suit, like tierce at piquet: and the last, the point, being the greatest number of pips on two or three cards of a suit in any one

hand. As to all these parts, the higher disannuls the lower.

After the cards have been dealt round, the banker inquires, *Who will trade?* which the players, beginning with the eldest hands, usually and separately answer by saying *for ready money*, or *I barter*. Trading for money is giving a card and a counter to the banker, who places the card under the stock or remainder of the pack, styled the bank, and returns in lieu thereof another card from the top. The counter is profit to the banker, who consequently trades with the stock free from expense. Barter is exchanging a card without pay with the next right-hand player, which must not be refused, and thus they go on changing alternately, till one of them obtains the object aimed at, and thereby stops the commerce; then all show their hands, and the highest tricon, sequence, or point, wins the pool. The player who first gains the wished for tricon, &c., should show the same immediately, without waiting till the others begin a fresh round; and if any one should choose to stand on the hand dealt, and show it without trading, none of the junior players can trade that deal, and if the eldest hand stand, then of course no person can trade. The banker always ranks as eldest hand, and in case of neither tricon or sequence, the game is decided by the point. Whenever the banker does not gain the pool, he is to pay a counter to the player who obtains it, and if the banker possess tricon, a sequence, or point, and do not win the pool, because another player has a better hand in these respects, he is to give a counter to every player.

COMMERCE the old way is played by several persons together, every one depositing a certain sum in the pool and receiving three fish or coun-

ters a piece, on which a value is fixed : as suppose sixpences are pooled, the counters then may be rated at 1*d.* or 1½*d.* each, so as to leave a sum for the player who gains the final sweep. After determining the deal, three cards, by one at a time, beginning on the left hand, are given to every player, and as many turned up on the board. The game is gained, as at the other, by pairs royal, sequences, or points, and should the three cards turned up be such as the dealer approves of, he may, previous to looking at the hand dealt to himself, take them up in lieu of his own ; but then he must abide by the same, and cannot afterwards exchange any during that deal. All the players, beginning with the eldest hand, may in rotation change any card or cards in their possession for such as lie turned up on the table, striving thereby to make pairs-royal, sequences, or flushes, and so on round again and again, till all have refused to change, or are satisfied ; but no person once standing can change again during the deal. Finally, the hands are all shown, and the possessor of the highest pair-royal, &c., or the eldest hand, if there should be more than one of the same value, takes the sum agreed upon out of the pool, and the person having the worst hand, resigns a fish or counter, which is called *going up*. The player, whose three are first gone in this manner, has the liberty of purchasing one more, called *buying a horse*, for a sum agreed, which is usually one-third of the original stake, to be put into the pool. The game thus goes on, the lowest hand resigning a fish, till all have resigned except one, who, continuing the longest on the board, thereby gains the pool or final sweep.

CONNEXIONS.

THIS game may be played by either three or four persons; if the former number, ten cards are to be given to each; but if the latter, then only eight a piece, which are dealt and bear the same import as at Whist, except that diamonds are always trumps here.

The connexions are formed as follows:

- 1st. By the two black aces.
- 2d. The ace of spades and king of hearts.
- 3d. The ace of clubs and king of hearts.

For the first connexion 2s. are drawn from the pool; for the second 1s., and for the third, and by the winner of the majority in tricks, 6d. each.

These sums are supposing guineas staked, but when only silver is pooled, then pence are drawn.

A trump played in any round where there is a connexion wins the trick, otherwise it is gained by the player of the first card of connexion, and after a connexion any following player may trump without incurring a revoke, and also whatever suit may be led, the person holding a card of connexion is at liberty to play it; but the others must, if possible, follow suit, unless one of them can answer the connexion, which should be done in preference.

No money can be drawn till the hands are finished, when the possessors of the connexions are to take according to precedence, those who have the majority of tricks taking last.

LANSQUENET.

THIS game may be played by almost any number of people, although only one pack of cards is used at a time, during each deal. The dealer, who has rather an advantage, begins by shuffling the cards, and having them cut by any other person of the party; after which he deals out two cards on his left hand, turning them up; then one for himself and a fourth, which he places in the middle of the table for the company, called the *rejouissance* card. Upon this card any, or all of the company, except the dealer, may put their money, either a limited or unlimited sum, as may be agreed on, which the dealer is obliged to answer, by staking a sum equal to the whole that is put upon it by different persons. He continues dealing, and turning the cards upwards, one by one, till two of a sort appear; for instance two aces, two deuces, &c., which, in order to separate, and that no person may mistake for single cards, he places on each side of his own card; and as often as two, three, or the fourth card, of a sort come up, he always places them in the same manner, on each side of his own. Any single card the company has a right to take and put money upon, unless the dealer's own card happens to be double, which often occurs by this card being the same as one of the two cards which he first of all dealt out on his left hand. Thus he continues dealing till he brings either their cards or his own. As long as his own card remains undrawn he wins; and whichever comes up first loses. If he draw or deal out the two cards on his left, which are called the hand-cards, before his own, he is en-

titled to deal again; the advantage of which is merely his being exempted from losing when he draws a similar card to his own immediately after he has turned up one for himself.

This game is often played more simply without the *rejouissance* card, giving every person round the table a card to put money upon. Sometimes it is played by dealing only two cards, one for the dealer, and another for the company.

THE GAME OF LOO.

Loo or Lue, subdivided into limited and unlimited Loo, a game, the complete knowledge of which can be easily acquired, is played with five or three cards, though most commonly with five, dealt from a whole pack, either first three and then two, or by one at a time. Several persons may play together, but the greatest number can be admitted when with three cards only.

After five cards have been given to each player, another is turned up for trump; the knave of clubs generally, or sometimes the knave of the trump suit, as agreed upon, is the highest card, and styled Pam; the ace of trumps is next in value, and the rest in succession, as at whist. Each player has the liberty of changing for others from the pack all or any of the five cards dealt, or of throwing up the hand in order to escape being looed. Those who play their cards either with or without changing, and do not gain a trick, are looed; as likewise is the case with all who have stood the game, if a flush occur, which obliges each, except a player holding Pam, or an inferior flush, to deposit a stake, to be divided

among the winners at the ensuing deal, according to the tricks which may then be made. For instance, if every one at dealing should stake half-a-crown, the tricks are entitled to sixpence apiece, and whoever is looed must put down half-a-crown, exclusive of the deal: sometimes it is settled that each person looed shall pay a sum equal to what happens to be on the table at the time. Five cards of a suit, or four with Pam, compose a flush, which sweeps the board, and yields only to a superior flush, or an equal one in the elder hand. When the ace of trumps is led, it is usual to say "Pam be civil," the holder of Pam is then expected to let the ace pass.

When Loo is played with three cards, they are dealt by one at a time, Pam is omitted, and the cards are not exchanged, nor permitted to be thrown up.

In different companies these games are frequently played with a few trifling variations from the manner here stated.

THE GAME OF LOTO.

For this game, which may be played by an unlimited number of persons, boxes containing 100 counters are required; 14 fishes, every one reckoned as ten counters; 12 contracts, valued at ten fish a piece; a pack of 24 very large cards, with fifteen different numbers marked on each, and in a bag 90 knobs or balls, numbered from one to ninety; besides a board with ten cavities cut therein, for the purpose of placing the knobs as drawn. These are sold at the Tunbridge ware or turners' shops; fresh covers for the cards may

be purchased, ready printed, and any book-binder can easily make a new, or repair the old pack.

RULES.

1. Every player should draw two cards, and deposit a stake previously agreed upon; and if the party be not too numerous, four or six cards may be drawn, laying down a double or treble stake accordingly; when the players are more than twelve, some are only to have one card, paying half a stake; and likewise should the players not take all the cards among them, the remainder of the pack is to be laid aside till some other persons join the set. From the cards not taken, players may exchange one or more of those drawn, or they may change with one another; similar exchanges, if the company consent, may also be made previous to each drawing, and likewise, prior to replenishing the pool, cards may be thrown up, or additional ones drawn from those put by; stakes being paid proportionably.

2. The stakes are to be put together in a pool, placed on the middle of the table, and also on the table a quantity of counters sufficient for the number of cards taken; upon the counters a value is to be fixed adequate to the stakes first deposited, from the whole of which a sum must be reserved enough to pay, at the conclusion of the game, all the counters laid upon the table.

3. After counting the 90 knobs, so as to be certain they are right, the eldest hand shall then first shake them well together in the bag, and afterwards draw out ten successively, not only declaring the number of each as drawn, but also placing the same conspicuously on the board.

4. As soon as the number is declared, each player having the same on one or more cards, is

to take up counters sufficient to lay one upon that number every time it occurs, and so on till the ten knobs are down.

5. When only part of the pack is taken, and a number drawn happens not to be upon any player's card, then the players may put away that knob, till some person takes the card on which it is printed.

6. When ten knobs are drawn out, every player examining the cards separately, and having only one counter upon any horizontal line, wins for that no more than the counter, which is styled gaining by *abstract*; where two counters are on the same horizontal line of a separate card, the player gains an *ambo*, and becomes entitled to five counters, besides the two; when three are upon the same line, the player obtains a *terne*, and is to receive 25 additional counters; if four should be on the same line, that is called a *quaterne*, and wins 100 counters additional; when five occur on the same line, it makes a *quinterne*, and gains 250 additional counters, and the player is entitled to payment out of the pool, for all the above acquisitions, previous to another drawing. Instead of giving counters, payment for the same may at once be made from the stock in the pool.

7. The knobs are then to be returned, and the bag given to the next player in rotation, who is to shake the same, and draw, &c., as before stated.

8. Whenever the pool is exhausted, the players must contribute again according to the number of cards taken; and when it is resolved to finish the game, they agree among themselves to have only a fixed number of drawings more.

9. At the last drawing each player proceeds as has been directed, but the drawing concludes

when no more counters are left on the table, and the players are then beginning with the eldest hand to be paid out of the pool as far as the money will go ; and when that is expended, the others remain unpaid, which is styled a bankruptcy ; next the players are to reunite the counters with those that were on their cards, and receive payment for them out of the fund reserved at the commencement of the game.

10. There are also cards of a new combination, which may be played by 6=12=18=or 24, observing that when six cards only are taken, only one counter is given ; if 12, two ; if 18, three ; and when 24, four counters ; and also when but six cards are taken, they must be either from 1 to 6—7 to 12—13 to 18—or 19 to 24 ; if 12 cards, from 1 to 12—or 13 to 24 ; for 18 cards, from 1 to 18 ; and when 24, the whole number.

11. The counters may refer for the payment to the amount of the stakes deposited in the stock.

For 24 cards	144	times	10.
18.....	108	.....	10.
12.....	72	.....	10.
6.....	36	.....	10.

There are other methods of playing at Loto, but the above is the way most approved.

THE GAME OF LOTTERY.

LOTTERY may be played by a large company with two complete packs of cards, one for the prizes, the other for the tickets, and dealt by any two of the party that may choose, for the deal is neither advantageous nor otherwise. Each player pools a fixed sum, or takes a certain number of counters, on which a settled value is put, and which are placed in a box or pool as a fund for the lottery; then, after the cards have been shuffled, and are cut by the left-hand neighbour, one dealer gives to every player a card, faced downwards, for the lots or prizes, on which are to be placed different numbers of counters from the pool, at the option of the person to whom such card has been given; afterwards the second dealer distributes from the other pack a card to each player, for the tickets; next the lots are turned by one of the managers, and whosoever possesses a corresponding card receives the stake placed thereon, and those remaining undrawn are added to the fund in the pool. The dealers then collect the cards and proceed as before, till the fund is exhausted, when the party pool again, and those who have gained more counters than they want, receive the difference in money.

Another method is, to take at random three cards out of one of the packs, and place them face downwards, on a board or in a bowl on the table for the prizes; then every player purchases from the other pack any number of cards for tickets as may be most agreeable, paying a fixed sum or certain quantity of counters for each, which sums or counters are put in different proportions on

the three prizes to be gained by those who happen to have purchased corresponding cards, and such as happen not to be drawn are continued till the next deal.

This game may be played with a single pack, by separating the same into two divisions, each containing a red and black suit.

THE GAME OF MATRIMONY.

MATRIMONY may be played by any number of persons from five to fourteen. This game is composed of five chances, usually marked on a board or sheet of paper, as follows:—

Best

The ace of Diamonds turned up.

INTRIGUE,

OR

QUEEN AND KNAVE.

Confederacy
King and Knave.

Matrimony.
King and Queen.

Pairs
The Highest.

N.B. The ace of diamonds turned up takes the whole pool, but when in hand ranks only as any other ace, and if not turned up, nor any ace in hand, then the king, or next superior card, wins the chance styled best.

The game is generally played with counters, and the dealer stakes what he pleases on each or any chance, the other players depositing each the same quantity, except one; that is, when the dealer stakes twelve, the rest of the company lay down eleven each. After this, two cards are dealt round to every one, beginning on the left, then to each one other card turned up, and he who so happens to get the ace of diamonds sweeps all; should it not be turned up, then each player shows his hand, and should any person have matrimony, intrigue, &c., he takes the counters on that point: when two or more happen to have a similar combination, the eldest hand has the preference, and should any chance not be gained, it stands over to the next deal.

THE GAME OF QUINZE.

THIS is a French game, usually played by two persons only, admired for its simplicity and fairness, depending entirely upon chance, being soon decided, and not requiring the attention of most other games on the cards, and therefore calculated for those who love to sport upon an equal hazard.

It is called quinze from fifteen being the game, made in the following manner:—First, the cards must be shuffled by the players, and when they have cut for deal, which belongs to him who cuts the lowest, they may be shuffled again, the dealer

having the privilege to shuffle last: this being done, the adversary cuts, after which the dealer gives one card to his adversary, and one to himself; if the adversary do not like his card, he has a right to have as many more given to him, one after the other, the pips of which will make 15, or come nearest to it, which are usually given from the top of the pack; for example, if he should have a deuce, and draw a five, which make 7, he should go on, in hopes of coming nearer to 15; if he then draw an eight, which makes just 15, and be elder hand, he is sure of winning the game: but should he over-draw and make above 15, he loses, unless the dealer does the same, in which case it is a drawn game, and they double the stakes; and thus go on till one of them has won the game by standing, and being 15, or the nearest to it, below that number, &c. At the end of each game the cards are put up and shuffled, and the players cut anew for the deal, the elder hand constantly having the advantage.

THE GAME OF SPECULATION.

THIS is a noisy round game, that several may play, using a complete pack of cards, bearing the same import as at whist, with fish or counters, on which such a value is fixed as the company may agree upon. The highest trump, in each deal, wins the pool; and whenever it happens that no trump is dealt, the company pool again, and the event is decided by the succeeding round. After determining the deal, &c., he who is to deal pools six fish, and every other player four; next three cards are given to each player by one at a time,

and another turned up for trump, which belongs to the dealer, who has the privilege of selling it to the highest bidder, unless it be an ace, which gives him the pool at once. The cards are not to be looked at, except in this manner :—the eldest hands shows the uppermost of his three cards, which, if a superior trump to the dealer's, the company may speculate on by bidding for it as before. When this is settled, he who sits next to the purchaser is considered as eldest hand, and shows the uppermost of his cards ; but if the first card shown should not prove a superior trump, then the next in order to the first player shows the uppermost of his cards, and so the showing goes on, the company speculating as they please, till all the cards are discovered, when the possessor of the highest trump wins the pool.

N.B. The holder of the trump, whether by purchase or otherwise, is exempted from showing his cards in rotation, keeping them concealed till all the rest have been turned up.

To play this game well, little more is requisite than recollecting what superior cards of the trump suit appeared in the preceding deals, and calculating thereby the probability of the trump offered for sale, proving the highest in the deal then undetermined.

THE GAME OF VINGT-UN.

VINGT-UN, or twenty-one, very much resembles Quinze ; but may be played by two or more persons, and as the deal is advantageous, and often continues long with the same person, it is usual to determine it at the commencement by the first ace turned up.

The cards must all be dealt out in succession, unless a natural vingt-un occurs, and in the meantime the pone, or youngest hand, should collect those that have been played, and shuffle them ready for the dealer against the period when he shall have distributed the whole pack. The dealer is first to give two cards, by one at a time to each player, including himself, then to ask every person in rotation, beginning with the eldest hand on the left, whether he stands or chooses another card, which, if required, must be given from off the top of the pack, and afterwards another, or more, if desired, till the points of the additional card or cards, added to those dealt, exceed or make 21 exactly, or such a number less than 21, as may be judged proper to stand upon ; but when the points exceed 21, then the cards of that individual player are to be thrown up directly, and the stake to be paid to the dealer, who is also in turn entitled to draw additional cards, and on taking a vingt-un is to receive double stakes from all who stand the game, such other players excepted who may likewise have 21, between whom it is thereby a drawn game : when any person has a vingt-un, and the dealer not, he who has it wins double stakes of the dealer ; in other cases, except a natural vingt-un happens,

the dealer pays single stakes to all whose numbers under 21 are higher than his own, and receives from those who have lower numbers; but nothing is paid or received by such players as have similar numbers to the dealer; and when the dealer draws more than 21, he is to pay to all who have not thrown up.

Twenty-one, made by an ace and a ten, or court card, whenever dealt in the first instance, is styled a *Natural Vingt-un*, should be declared immediately, and entitles the possessor to the deal, besides double stakes from all the players, unless there shall be more than one natural vingt-un, in which case the younger hand or hands so having the same are excused from paying to the eldest, who takes the deal, of course.

N.B. An ace may be reckoned either as 11 or 1; every court-card is counted as 10, and the rest of the pack according to their pips.

The odds of this game depend merely upon the average quantity of cards likely to come under or exceed 21: for example, if those in hand make 14 exactly, it is 7 to 6 that the card next drawn will not make the number of points above 21, but if the points be 15, it is 7 to 6 against that hand; yet it would not, therefore, always be prudent to stand at 15, for as the ace may be calculated both ways, it is rather above an even bet that the adversary's two first cards amount to more than 14. A natural vingt-un may be expected once in seven deals when two, and twice in seven when four people play, and so on according to the number of players.

PART II.

MIXED GAMES OF CHANCE AND SKILL.

INTRODUCTION.

WHEN chance reigns absolutely in a game, we can, as it has been shewn in the first part of this work, always determine the advantage or disadvantage of the players.

But it is not the same with those games in which the skill of the player has a share in producing the result. Thus, the light which has guided us in our investigation of games of pure chance, fails us here in the solution of those questions, the result of which do not entirely depend upon chance.

The first rule of analysis is, that we cannot discover what is unknown, but by means of what is known; but in most of the questions which are proposed upon mixed games, what is known is not sufficient to discover what is to be found, and the reason is obvious:—1st. From our uncertainty of the measures to be taken by those, whose actions must necessarily exercise an influence over our undertakings. The impulse given to a ball decides both its direction and its velocity, for the laws of impulse are fixed and invariable; but the reason, the different motives which influence the conduct

of men, baffle all calculation ; for oftentimes they are ignorant of their real interests, and even when they know them, are as frequently determined by caprice as by reason. The second cause of our ignorance of things which depend upon the future, arises from the limited power of the human intellect.

Thus, to determine the value of the throw at backgammon between two equal players—the value of the hand at piquet—which piece is the most advantageous at chess, the bishop or the knight—and in what ratio one is better than the others, are problems, the solution of which baffles all human analysis. All that a player has to do, therefore, is to content himself with seeking probability, and to endeavour to approach truth as nearly as possible.

These reflections will be sufficient to satisfy my readers that there are problems which it is impossible to solve, while the few I have given in the following pages will make them acquainted with the nature of those, the solution of which may be attempted with hopes of success.

W H I S T.

ODDS *against and for the dealer's hand of trumps,*

158753389899	to 1, that he don't hold 13 trumps.
338493367	to 1 12 }
3215258	to 1 11 }
77065	to 1 10 }
3710	to 1 9 }
317	to 1 8 }
44	to 1 7 }
8	to 1 6 }
$2\frac{3}{7}$	to 1, or 17 to 7 5 }
7	to 5 that the dealer holds 4 }
$5\frac{3}{5}$	to 1, or 28 to 5 3 }
$39\frac{1}{4}$	to 1 2 }

or more.

ODDS *for and against any particular non-dealer's hand of trumps.*

12211799222	to 1, that he does not hold 12 trumps.
53326633	to 1 11 }
778068	to 1 10 }
25457	to 1 9 }
1567	to 1 8 }
163	to 1 7 }
$26\frac{5}{6}$	to 1 6 }
$6\frac{1}{5}$	to 1 5 }
7	to 4, or near 9 to 5 4 }
13	to 7 that he holds 3 }
$7\frac{1}{2}$	to 1, or 38 to 5 2 }
57	to 1 1 }

or more.

ODDS against the dealer holding a certain exact quantity of trumps.

51	to 1, that he does not hold exactly	7	trumps.
12	to 1	6	
4½	to 1	5	
2½	to 1, or 12 to 5.....	4	
2¾	to 1, or 11 to 4.....	3	
39½	to 1, against holding only the trump turned up.		

ODDS against any assigned non-dealer holding an exact quantity.

183	to 1, that he does hot hold exactly	7	trumps.
32	to 1	6	
8½	to 1, or 44 to 5.....	5	
3½	to 1	4	
12	to 5	3	
3½	to 1, or 23 to 7.....	2	
9½	to 1, better than 9 to 1.....	1	
57	to 1, that he is not without a a trump.		

It is 27 to 2 that the dealers have not the four honours.

23 to 1 nearly, that the eldest hands have not the four honours.

8 to 1 nearly, that neither one side or the other have the four honours.

13 to 7 nearly, that the two dealers do not reckon honours.

20 to 7 nearly, that the two elder hands do not reckon honours;

and 25 to 16 that the honours are not equally divided.

There is but 1 chance in 8192 of getting 7 by tricks

13	8192	6 —
78	8192	5 —
286	8192	4 —
715	8192	3 —
1287	8192	2 —
1716	8192	1 —

The probability of getting one or more

by tricks is..... $\frac{1190}{4096}$

Three or more $\frac{1093}{8192}$

Four or more $\frac{378}{8192}$

Five or more $\frac{92}{8192}$

Six or more $\frac{14}{8192}$

Seven $\frac{1}{8192}$

From which it will not be difficult to discover, that when the points of the game are 8 to 9, that without considering whether the parties scoring 8 are dealers or not, the odds in their favour one time with another, are nearly *seven to five*.

THE GAME OF WHIST.

THIS game, which requires great care and attention, is played by four persons, who cut for partners ; those who cut the two highest cards are partners against the two lowest, and the person who cuts the lowest card is entitled to the deal. In cutting, the ace is accounted the lowest.

Though it is customary for only the elder hand, and afterwards the dealer, to shuffle the cards, yet each player has a right so to do before the deal, but the elder hand ought to shuffle last, except the dealer.

The pack is afterwards cut by the right-hand adversary, and the dealer is to distribute the cards, alternately, one at a time, to each of the players, beginning with the left-hand adversary, till the last card, which must be turned up, being the trump, and left on the table till the first trick is played.

No one, before his partner plays, should intimate, that he has or has not won the trick ; even the attempt to take up a trick, though won before the last partner has played, is deemed very improper. No intimations of any kind during the

play of the cards between partners are to be admitted. The mistake of one party is the game of the adversary. However, there is one exception to this rule, in case of a revoke : if a person happen not to follow suit, or to a trump a suit, the partner is permitted to inquire, whether he is sure he has none of that suit in his hand. This indulgence must have arisen from the severe penalties annexed to revoking, which affect the parties equally.

The person on the dealer's left hand is called the elder hand, and plays first ; and whoever wins the trick becomes the elder hand, and plays again : and so on till all the cards are played out. The tricks belonging to each party should be turned and collected by the respective partners of whoever wins the first trick in that hand. Each trick above six is reckoned one point towards the game. The ace, king, queen, and knave of trumps are called honours ; and when either of the parties has in his own hand, or between himself and his partner, three honours, they count two points towards the game ; and if they should have the four honours, they count four points. Ten points make the game.

TWENTY-FOUR SHORT RULES FOR LEARNERS.

1. ALWAYS lead from your strong suit, and be cautious of changing suits.
2. Lead through an honour when you have a good hand.
3. Lead through the strong suit, and up to the weak, except in trumps, unless strong in them.
4. Lead a trump, if you have four or five, and a good hand besides.
5. Sequences are eligible leads, of which play the highest card.

6. Follow your partner's lead, not your adversary's.
7. Do not lead from ace queen or ace knave.
8. Avoid leading an ace unless you have the king to it.
9. Never lead a thirteenth card, unless trumps are out.
10. Nor trump a thirteenth card, except last player.
11. Play your best card third hand.
12. When in doubt win the trick.
13. When you lead small trumps, begin with the highest.
14. Do not trump out, when your partner is likely to trump a suit.
15. If you hold only small trumps, make them when you can.
16. Make your tricks early, and be careful of finessing.
17. Be sure to make the odd trick when in your power.
18. Never force your adversary with your best card, unless you have the next best.
19. If you have only one card of any suit, and but two or three small trumps, lead the single card.
20. Always try to keep a commanding card to bring in your strong suit.
21. In your partner's lead, endeavour to keep the command in his hand.
22. Keep the card you turn up as long as you conveniently can.
23. Should your antagonists be 8, and you have no honour, play your best trump.
24. Always consider your score, and play your hand accordingly.

METHODS OF SCORING AT WHIST.

One.	Two.	Three.	Four.	Five.	Six.	Seven.	Eight.	Nine.
0	00	000	0000	0	0	00	000	0
				00	000	0	0	0
								0
0	0	0	00	0	0	0	0	00
0	0	0	0	00	0	0	00	0
0	0	0	0	00	00		0	0

MR. HOYLE'S GAME AT WHIST.

GENERAL RULES FOR BEGINNERS.

1. LEAD from the best suit; if you have a sequence of king, queen, and knave, or queen, knave, and ten, they are sure leads, and gain the tenace to yourself or partner in other suits. Begin with the highest of a sequence, unless you have five in number; in that case play the lowest (except in trumps, when always play the highest), in order to get the ace or king out of your partner's or adversary's hand, and make room for your strong suit.

2. With five of the smallest trumps, and not one good card in the other suits, trump out, which will make your partner the last player, and give him the tenace.

3. If two small trumps only, with ace and king of two other suits, and a deficiency of the fourth

suit, make as many tricks as you can immediately, and if your partner should refuse either of your suits, do not force him, because that may weaken his game too much.

4. Seldom return your partner's lead immediately, if you have good suits of your own to play, unless it be to endeavour to save or win a game : what is meant by good suits is sequences of king, queen, and knave, or queen, knave, and ten.

5. If each party have five tricks, and you are assured of getting two from your own hand, win them, in expectation of scoring two that deal ; because losing the odd trick makes two difference, and you play 2 to 1 against yourself. Except when you see a probability of saving your lurch or winning the game ; in either of which cases risk the odd trick.

6. When you have a probability of winning the game, risk a trick or two, because the share of the stake, which your adversary has by a new deal, will amount to more than the point or two which you risk.

The foregoing case refers to games 1 to 6, in pages 103, 104, 105.

7. Should your adversary be six or seven love, and you are to lead, risk a trick or two, in hopes of putting the game upon an equality ; therefore, admitting you have the queen or knave, and one other trump, and no good cards in other suits, play the queen or knave of trumps ; by which means you will strengthen your partner's game, if he be strong in trumps ; and if weak, you do him no injury.

8. Should you be four of the game, play for an odd trick, in hopes to save one half of the stake ; and, in order to win the same, though you are pretty strong in trumps, be cautious how you

trump out. What is meant by strength in trumps, is, one honour and three trumps.

9. Should you be nine of the game, and very strong in trumps, if your partner have a chance of trumping any of your adversary's suits; do not trump out, but give him an opportunity of trumping those suits. If your game be scored only 1, 2, or 3, you must play the reverse, and also in 5, 6, or 7; because in these two cases, you play for more than one point.

10. If being last player you find, that the third hand cannot put on a good card to his partner's lead, admitting you have no good game of your own to play, return the lead upon the adversary; which gives your partner the tenace in that suit, and often obliges the adversary to change suits, and consequently gives the tenace in that new suit also.

11. If you have ace, king, and four small trumps, begin with a small one; because it is an equal wager that your partner has a better trump than the last player: in which case, you have three rounds of trumps; and you cannot otherwise fetch out all.

12. If ace, king, knave, and three small trumps, begin with the king, and then play the ace, except one of the adversaries should refuse trumps, because the odds are in your favour, that the queen falls.

13. If either king, queen, and four small trumps, or queen, knave, and four small trumps, begin with a small one, because the odds are on your side, that your partner has an honour.

14. If king, queen, ten, and three small trumps, begin with the king, because you have a fair chance that the knave falls in the second round,

or you may finesse your ten upon the return from your partner.

This refers to cases 1, 2, 3, in pages 105, 106.

15. If queen, knave, nine, and three small trumps, begin with the queen, because you have a fair chance, that the ten will fall in the second round, or you may wait to finesse the nine.

Refers to cases 1, 2, 3, in pages 105, 106.

16. If knave, ten, and four small trumps, begin with a small one. See the reason in No. 13.

17. If knave, ten, eight, and three small trumps, begin with the knave, in order to prevent the nine from making a trick; and the odds are in your favour, that the other three honours fall in two rounds.

18. If six trumps of a lower denomination, begin with the lowest, unless you should have ten, nine, and eight, and an honour is turned up against you; in that case, if you play through the honour, begin with the ten, which obliges the adversary either to play his honour to disadvantage, or leaves it in your partner's option, whether he will pass it or not.

19. If ace, king, and three small trumps, begin with a small one. See in No. 13.

20. If ace, king, and knave, and two small trumps, begin with the king, which, next to a certainty, informs your partner, that you have ace and knave remaining; and putting the lead into your partner's hand, he plays you a trump; upon which finesse the knave, and no ill consequence can arise, except the queen lies behind you single.

Refers to cases 1, 2, 3, in pages 105, 106.

21. If king, queen, and three small trumps, begin with a small one. See in No. 13.

22. If king, queen, ten, and two small trumps, begin with the king. See in No. 20.
23. If the queen, knave, and three small trumps, begin with a small one. See in No. 13.
24. If queen, knave, nine, and two small trumps, begin with the queen. See in No. 15.
25. If knave, ten, and three small trumps, begin with a small one. See in No. 13.
26. If knave, ten, eight, and two small trumps, begin with the knave, because in two rounds probably the nine falls; or upon the return of trumps from your partner, you may finesse the eight.
27. If five trumps of a lower denomination, begin with the lowest, unless you have a sequence of ten, nine, and eight; in that case begin with the highest.
28. If ace, king, and two small trumps, begin with a small one. See in No. 13.
29. If ace, king, knave, and one small trump, begin with the king. See in No. 20.
30. If king, queen, and two small trumps, begin with a small one. See in No. 13.
31. If king, queen, ten, and one small trump, begin with the king, and wait the return of trumps from your partner, when finesse the ten, in order to win the knave.
32. If queen, knave, nine, and one small trump, begin with the queen, in order to prevent the ten from making a trick.
33. If knave, ten, and two small trumps, begin with a small one. See in No. 13.
34. If knave, ten, eight, and one small trump, begin with the knave, to prevent the nine from making a trick.
35. If ten, nine, eight, and one small trump, begin with the ten, which leaves it in your partner's discretion whether he will pass it or not.

36. If ten, and three small trumps, begin with a small one.

SOME PARTICULAR RULES.

1. If you have ace, king, and four small trumps, with a good suit, play three rounds of trumps, otherwise your strong suit may be trumped.

2. If king, queen, and four small trumps, with a good suit, trump out with the king, because, when you have the lead again, you will have three rounds of trumps.

3. If king, queen, ten, and three small trumps, with a good suit, lead the king, in expectation of the knave falling at the second round; and do not wait to finesse the ten, for fear your strong suit should be trumped.

4. If queen, knave, and three small trumps, with a good suit, trump out with a small one.

5. If queen, knave, nine, and two small trumps, with a good suit, lead the queen in expectation of the ten falling at the second round; and do not wait to finesse the nine, for the reason assigned above in case 3.

6. If knave, ten, and three small trumps, with a good suit, trump out with a small one.

7. If knave, ten, eight, and two small trumps, with a good suit, trump out with the knave in expectation of the nine falling at the second round.

8. If ten, nine, eight, and one small trump, with a good suit, play the ten.

PARTICULAR GAMES.

1. SUPPOSE you are elder hand, and your game to consist of king, queen, and knave of one suit;

ace, king, queen, and two small cards of another ; king and queen of the third suit, and three small trumps. Begin with the ace of your best suit, which informs your partner, that you have the command of it ; then do not proceed with the king of the same suit, but play a trump next ; and if your partner should have no strength in trumps, and your adversary should play to you weak suit, *viz.* the king and queen only, in that case, lead the king of the best suit ; and if you observe a probability of either adversary being likely to trump that suit, play the king of the suit of which you have king, queen, and knave. If it should so happen, that your adversaries do not play to your weakest suit, though apparently your partner cannot help you in trumps, then trump out as often as the lead comes into your hand ; by which means, supposing your partner to have but two trumps, and that your adversaries have four each, by three rounds, there remain only two against you.

II. ELDER HAND.

Suppose you have ace, king, queen, and one small trump, with a sequence from the king of five in another suit, with four other cards of no value. Begin with the queen of trumps, and pursue the lead with the ace, which demonstrates that you have the king ; and as it would be bad play to follow trumps the third round, till you have first gained the command of your great suit, by stopping thus, it likewise informs your partner, that you have the king, and one trump only remaining ; because if you had the ace, king, queen, and two trumps more, and trumps went round twice, you could receive no damage by playing the king the third round. When you lead sequence,

begin with the lowest card, that if your partner should have the ace he may play it, which would make room for your suit. And since you have let your partner into the state of your game, as soon as he has the lead, if he have a trump or two remaining, he will play trumps to you, with a moral certainty, that your king clears your adversaries' hand.

III. SECOND PLAYER.

Suppose you have ace, king, and two small trumps, with a quint-major of another suit; in the third suit three small cards, and in the fourth suit one. Your adversary on your right hand begins with playing the ace of your weak suit, and then the king: in that case throw away a losing card; and if he proceed to play the queen, throw away another losing card; and do the like the third time, in hopes your partner may trump it, who will in that case either play a trump or to your strong suit. If trumps be played, go on with them two rounds, and then play your strong suit; by which means, if there happen to be four trumps in one of your adversaries' hands, and two in the other, which will nearly be the case, your partner being entitled to have three trumps out of the nine, your strong suit forces their best trumps, and you have a probability of making the odd trick in your own hand only; whereas if you had trumped one of your adversaries' best cards, you had so weakened your hand, as probably not to have made more than five tricks.

4. Suppose you have ace, queen, and three small trumps; ace, queen, ten, and nine of another suit; with two small cards of each of the others: your partner leads to your ace, queen, ten, and nine; and as this game requires rather to deceive your

adversaries, than to inform your partner, put on the nine, which naturally induces the adversary to play trumps, if he win that card. As soon as trumps are played to you, return them to your adversary, keeping the command in your own hand. If your adversary, who led trumps to you, put up a trump which your partner cannot win, and if he have no good suit of his own, he will return your partner's lead, imagining that suit lies between his partner and yours : if this finesse succeed, you will be a great gainer by it, and it is scarcely possible to be a loser.

5. Suppose you have ace, king, and three small trumps, with a quart from a king, and two small cards of another suit, and one small card to each of the other suits ; your adversary leads a suit of which your partner has a quart-major : your partner puts on the knave, and then proceeds to play the ace : you refuse to that suit by playing your loose card ; when your partner plays the king, your right-hand adversary trumps it, suppose with the knave or ten, do not overtrump him, which may probably lose you two or three tricks, by weakening your hand : but if he lead to the suit of which you have none, trump that, and then play the lowest of your sequence, in order to get the ace either out of your partner's or adversary's hand ; which accomplished, as soon as you get the lead, play two rounds of trumps, and then your strong suit. Instead of your adversary playing to your weak suit, if he should play trumps, do you go on with them two rounds, and then proceed to get the command of your strong suit.

CERTAIN OBSERVATIONS, WHEREBY YOU ARE ASSURED THAT YOUR PARTNER HAS NO MORE OF THE SUIT PLAYED EITHER BY YOURSELF OR HIM.

1. SUPPOSE you lead from queen, ten, nine, and two small cards of any suit, the second hand puts on the knave, your partner plays the eight : you holding queen, ten, and nine, it is a demonstration that he can have no more of that suit. Therefore play your game accordingly, either by forcing him to trump that suit, should you be strong in trumps, or by playing some other suit.

2. Suppose you have king, queen, and ten of a suit, and you lead your king, your partner plays the knave ; this demonstrates he has no more of that suit.

3. Suppose you have king, queen, and many more of a suit, and begin with the king, in some cases it is good play in a partner, when he has the ace, and one small card in that suit only, to win his partner's king ; for suppose he is very strong in trumps, by taking his partner's king, he trumps out, and after clearing the board of trumps, returns his partner's lead ; and having parted with the ace, has made room for his partner to make that whole suit, which possibly could not have been done if he had kept the command in his own hand. And supposing your partner has no other good card besides that suit, nothing is lost by the ace taking the king ; but if you have a good card to bring in that suit, you gain all the tricks made in the same, by this method of play. And as your partner has taken your king with the ace, and trumps out upon it you have reason to judge he has one of that suit to return ; therefore

do not throw away any of that suit, even to keep a king or queen guarded.

PARTICULAR GAMES, BOTH TO ENDEAVOUR TO DECEIVE AND DISTRESS YOUR ADVERSARIES, AND TO DEMONSTRATE YOUR GAME TO YOUR PARTNER.

1. SUPPOSE I play the ace of a suit of which I have ace, king, and three small ones; the last player does not choose to trump, having none of the suit; if not strong enough in trumps, I must not play out the king, but keep the command of that suit in my hand by playing a small one, in order to weaken his game.

2. If a suit be led, of which I have none, and a moral certainty that my partner has not the best of that suit, in order to deceive the adversary, I throw away my strong suit; but to clear up doubts to my partner when he has the lead, I throw away my weak suit. This method of play will generally succeed, unless against very good players; and even with them you will oftener gain than lose.

PARTICULAR GAMES TO BE PLAYED, BY WHICH YOU RUN THE RISK OF LOSING ONE TRICK ONLY TO GAIN THREE.

1. SUPPOSE clubs to be trumps, and a heart played by your adversary; your partner having none of that suit, throws away a spade; you then judge his hand to be composed of trumps and diamonds; and you winning that trick, and being too weak in trumps, dare not force him; and suppose you shall have king, knave, and one small

diamond; and farther, your partner to have queen, and five diamonds; in that case, by throwing out your king in your first lead, and your knave in your second, your partner and you may win five tricks in that suit; whereas if you had led a small diamond, and your partner's queen having been won with the ace, the king and knave remaining in your hand obstruct the suit: and though he may have the long trump, yet by playing a small diamond, and his long trump having been forced out of his hand, you lose by this method three tricks in that deal.

2. Suppose, in a similar case you should have queen, ten, and one small card in your partner's strong suit; which is to be discovered by the former example; and your partner knave and five small cards in his strong suit; you having the lead are to play your queen, and when you play again, your ten; and suppose him to have the long trump, by this method he makes four tricks in that suit; but should you play a small card in that suit, his knave being gone, and the queen remaining in your hand in the second round, and the long trump forced out of his hand, the queen remaining in yours obstructs the suit, by which method of play you lose three tricks in that deal.

3. In the former examples you have been supposed to have had the lead, and an opportunity of throwing out the best cards in your hand of your partner's strong suit, in order to make room for the whole suit: now suppose your partner to have the lead, and in the course of play, it appears to you that he has one great suit; for instance, ace, king, and four small ones, and that you have queen, ten, nine, and a very small one of that suit; when your partner plays the ace, you are

to play the nine; when he plays the king, you are to play the ten; by which means in the third round, you make your queen, and having a small one remaining, do not obstruct your partner's great suit; whereas if you had kept your queen and ten, and the knave had fallen from the adversaries, you had lost two tricks in that deal.

4. Suppose you find your partner to have one great suit, and that you have king, ten, and a small one of the same; your partner leads the ace: in that case play your ten, and in the second round the king: this prevents a possibility of obstructing your partner's great suit.

5. Suppose your partner to have ace, king, and four small cards in his great suit, and that you have queen, ten, and a small card in the same; when he plays his ace, do you play the ten, and when he plays his king, do you play the queen; by which method you only risk one trick to get four.

6. Now suppose you have five cards of your partner's strong suit; *viz.* queen, ten, nine, eight, and a small one; and that your partner has ace, king, and four small ones; when your partner plays the ace, do you play the eight; when he plays the king, do you play the nine; and in the third round, no one having any of that suit, except your partner and yourself, proceed then to play the queen, and next the ten; and having a small one remaining, and your partner two, you thereby gain a trick.

PARTICULAR GAMES TO BE PLAYED WHEN EITHER
OF YOUR ADVERSARIES TURNS UP AN HONOUR.

1. SUPPOSE the knave turned up on your right hand, and that you have king, queen, and ten; in

order to win the knave, begin with your king ; by which method, your partner may suppose you have queen and ten remaining, especially if you have a second lead, and do not proceed to your queen.

2. The knave being turned up as before, and you have ace, queen, and ten, by playing your queen, it answers the same purpose as the former rule.

3. If a queen be turned up on your right hand, and you have ace, king, and knave, by playing your king the purpose is in like manner answered.

4. Suppose an honour turned up on your left-hand, and you hold none, in that case lead through that honour ; but if you should hold one (except the ace) you must be cautious how you play trumps, because if your partner should hold no honour, your adversary will return your own game upon you.

A CASE TO DEMONSTRATE THE DANGER OF FORCING YOUR PARTNER.

SUPPOSE A and B, partners, and that A has a quint-major in trumps, with a quint-major and three small cards of another suit, and has the lead ; and suppose the adversaries C and D to have only five trumps in either hand ; in this case, A having the lead, wins every trick.

On the contrary, suppose C has five small trumps, with a quint-major and three small cards of another suit, and that C has the lead, who forces A to trump first, by which means A wins only five tricks.

A CASE TO DEMONSTRATE THE ADVANTAGE
BY A SAW.

SUPPOSE A and B partners, and that A has a quart-major in clubs, they being trumps, another quart-major in hearts, another quart-major in diamonds, and the ace of spades. And suppose the adversaries C and D to have the following cards: *viz.* C has four trumps, eight hearts, and one spade; D has five trumps and eight diamonds; C being to lead, plays a heart, D trumps it; D plays a diamond, C trumps it; and thus pursuing the saw, each partner trumps a quart-major of A's, and C being to play at the ninth trick, plays a spade, which D trumps; thus C and D have won the nine first tricks, and leave A with his quart-major in trumps only.

Whenever you can establish a saw, it is your interest to embrace it.

VARIETY OF CASES, INTERMIXED WITH CALCULATIONS, DEMONSTRATING WHEN IT IS PROPER, AT SECOND HAND, TO PUT UP THE KING, QUEEN, KNAVE, OR TEN, WITH ONE SMALL CARD OF ANY SUIT, &c.

1. SUPPOSE you have four small trumps, and in the three other suits have one trick secure in each: suppose also your partner has no trump, then the remaining nine trumps must be divided between your adversaries; perhaps five in one hand, and four in the other: as often as you have the lead, play trumps, and should you have four leads, in that case, your adversaries make only five tricks out of nine trumps; whereas if you had suffered

them to make their trumps singly, they might possibly have made nine.

This example shows the necessity of taking out two trumps for one upon most occasions.

There is an exception to the foregoing rule; if you find that your adversaries are very strong in any particular suit, and that your partner can give you no assistance in the same, in such a case examine your own, and also your adversaries' scores; because by keeping one trump in your hand to trump such suit, it may be either a means to save or win a game.

2. Suppose you have ace, queen, and two small cards of any suit; your right-hand adversary leads that suit; in such case, do not put on your queen; because it is equal that your partner has a better card than the third hand; if so, you have the command of the suit.

An exception to the foregoing rule is, in case you want the lead, then play your queen.

3. Never lead from king, knave, and one small card, because it is 2 to 1 that your partner has not the ace, and also 32 to 25, or about 5 to 4, that he has ace or queen; and therefore, as you have only about 5 to 4 in your favour, and must have four cards in some other suit, suppose the ten to be the highest, lead that suit, because it is an equal wager that your partner has a better card than the last player; and if the ace of the first mentioned suit lie behind you, which is also equal, if your partner have it not, in that case, on your adversaries leading this suit, you probably make two tricks.

4. Suppose, in the course of play, it appears that your partner and you have four or five trumps remaining, when your adversaries have none, and that you have no winning card, but have reason

to judge that your partner has a thirteenth or some other winning card in his hand ; in that case play a small trump, to give him the lead, that you may throw away any losing card in your hand, upon such thirteenth or other good card.

SOME DIRECTIONS FOR PUTTING UP AT SECOND
HAND, KING, QUEEN, KNAVE, OR TEN OF ANY
SUIT, &c.

1. SUPPOSE you have the king, and one small card of any suit, and that your right-hand adversary plays that suit ; if he be a good player, do not put on the king, unless you want the lead, because a good player seldom leads from a suit of which he has the ace, but keeps it to bring in his strong suit after the trumps are out.

2. Suppose you have a queen, and one small card, of any suit, and that your right-hand adversary leads the same ; do not put on the queen, because if the adversary have led from ace and knave, in that case, upon the return, he finessesthe knave, which is generally good play, especially if his partner have played the king ; and you thereby make your queen ; but by putting on the queen, it shows your adversary that you have no strength in that suit, and consequently puts him upon finessing upon your partner throughout the whole suit.

3. Likewise observe, in case you should have the knave or ten with a small card of any suit, it is generally bad play to put up either of them at second hand, because it is 5 to 2 that the third hand has either ace, king, or queen of the suit led ; therefore, as the odds against you are five to two, though you should succeed sometimes by

this method, yet in the main you must be a loser; because it demonstrates to your adversaries that you are weak, and consequently they finesse upon your partner throughout that whole suit.

4. Suppose you have ace, king, and three small cards of any suit that your right-hand adversary leads; upon which you play your ace, and your partner the knave. In case you are strong in trumps, return a small one in that suit, in order to let your partner trump: thereby you keep the command in your own hand, and at the same time give your partner an intimation that you are strong in trumps; therefore, he may play his game accordingly, either in attempting to establish a saw, or by trumping out to you, if he should have either strength in trumps, or the command of the other suits.

5. Suppose A and B's game is scored 6, the adversaries' C and D 7, and that nine rounds are played out, of which A and B have won seven tricks, and no honours are reckoned in that deal; in this case A and B have won the odd trick, which puts their game upon an equality; and suppose A to have the lead, and that he has two of the smallest trumps remaining, with two winning cards of other suits; and C and D have the two best trumps between them, with two other winning cards in their hands—as it is 11 to 3 that C has not the two trumps; and likewise 11 to 3 that D has them not; the odds being so much in A's favour to win the whole stake, it is his interest to play a trump: for suppose the stake to be 70*l.* depending, A and B win the whole, if he succeed by this method; but, on the contrary, should he play the close game, by forcing C or D to trump first, he having won the odd trick already, and being sure of winning two

more in his own hand, by this method his game will be scored 9 to 7, which is about 3 to 2, and therefore A and B's share of the 70*l.* will amount only to 42*l.*, and A only secures 7*l.* profit; but in the other case, upon the supposition that A and B have 11 to 3 of the stake depending, as before stated, A, by playing his trump, is entitled to 35*l.* out of the 70*l.* depending.

DIRECTIONS HOW TO PLAY WHEN AN ACE, KING,
OR QUEEN ARE TURNED UP ON YOUR RIGHT-
HAND.

1. SUPPOSE the ace is turned up on your right-hand, and that you have the ten and nine of trumps only, with ace, king, and queen of another suit, and eight cards of no value: begin with the ace of the suit of which you have the ace, king, and queen, which is an information to your partner that you have the command of it; then play the ten of trumps, because it is 5 to 2 that your partner has king, queen, or knave; and though it is about 7 to 2 that your partner has not two honours, yet, should he chance to have them, and they prove to be the king and knave, in that case, he will pass your ten, and as it is 13 to 12 against the last player holding the queen of trumps, upon supposition your partner has it not, when your partner has the lead, he will play to your strong suit, and you upon having the lead should play the nine of trumps, which puts it in your partner's power to be almost certain of winning the queen should he lie behind it.

The foregoing case shows how an ace turned up against you may be made less beneficial to your adversaries.

2. Should the king or queen be turned up on your right hand, the same method of play may be employed; but always consider your partner's skill, because a good player will generally make a proper use of such play, but a bad one seldom.

3. Suppose your right-hand adversary leads the king of trumps, and that you have the ace and four small trumps, with a good suit; in this case pass the king; and though he should besides have queen and knave of trumps, with one more, yet if a moderate player, he will play the small one, imagining that his partner has the ace: when he plays the small one, pass it also, because it is an equal chance that your partner has a better trump than the last player. If so, and a tolerable player, he will judge you have a good reason for this method, and, consequently, should he have a third trump remaining, will play it; if not, he will play his best suit.

4. *A critical case to win an odd trick.*—Suppose A and B partners against C and D, and the game to be nine all, and every trump out, A being the last player, has the ace and four other small cards of a suit, and one thirteenth card remaining: B has only two small cards of A's suit: C has queen and two other small cards of that suit; D has king, knave, and one small card of the same. A and B have won three, C and D four tricks; therefore A is to win four tricks in order to obtain the game. C leads this suit, and D puts on the king; A gives him that trick, D returns the suit; A passes it, and C plays his queen; thus C and D have won six tricks, and C imagining the ace of the suit to be in his partner's hand, returns it; by which means A wins the four last tricks, and consequently the game.

5. Suppose you have the king and five small trumps, and your right-hand adversary plays the queen ; in that case do not put on the king, because it is an equal chance that your partner has the ace ; and suppose your adversary should have queen, knave, ten, and one small trump, it is also an equal wager that the ace lies single, either in your adversary's hand or your partner's ; in either of which cases it is bad play to put on your king ; but if the queen of trumps be led, and you have the king, with only two or three trumps, it is then best to put on the king, because it is good play to lead from the queen and one small trump only ; and should your partner have the knave, and your left-hand adversary hold the ace, your neglecting to put on the king loses a trick.

THE TEN OR NINE BEING TURNED UP ON YOUR
RIGHT HAND.

1. SUPPOSE the ten turned up, and that you have king, knave, nine, and two small trumps, with eight other cards of no value, and that it is proper to lead trumps : in that case, begin with the knave, in order to prevent the ten from making a trick ; and though it is but about 5 to 4 that your partner holds an honour, yet if that should fail, by finessing the nine on the return of trumps from your partner, you have the ten in your power.

2. The nine being turned up, and you have ten, eight, and two small trumps, by leading the ten, it answers the same purpose.

3. Make a wide difference between a lead of choice, and a forced lead of your partner's ; because, in the first case, he is supposed to lead from his best suit, and finding you deficient in

that, and not being strong enough in trumps, and not daring to force you, he then plays his next best suit, which demonstrates that he is weak in trumps; but should he persevere, by playing off his first lead, judge him strong in trumps, and play your game accordingly.

4. Nothing is more pernicious than to change often, because in every new suit you run the risk of giving your adversary the tenace; and, therefore, though you lead from a suit of which you have the queen, ten, and three small ones, and your partner puts on the nine only, in that case, if you should happen to be weak in trumps, and have no tolerable suit to lead from, it is best to pursue the lead of that suit by playing your queen, which leaves it in your partner's option whether he will trump or not, in case he has no more of that suit; but in your second lead, if you should happen to have the queen or knave, with one small card only of any other suit, it would be better to lead from your queen or knave, it being 5 to 2 that your partner has one honour at least in it.

5. When you have ace, king, and one small card of any suit, with four trumps; if your right-hand adversary lead that suit, pass it, because it is an equal wager that your partner has a better card in it than the third hand; if so, you gain a trick; if otherwise, as you have four trumps, you may not lose, because you probably will have the long trump.

CAUTIONS NOT TO PART WITH THE COMMAND OF YOUR ADVERSARY'S GREAT SUIT, &c.

1. In case you are weak in trumps, and it does not appear your partner is strong in them, be

cautious how you part with the command of your adversary's great suit ; for suppose your adversary plays the ace of a suit of which you have the king, queen, and one small card only, and upon playing the same suit again you put on your queen, which makes it almost certain to your partner that you have the king, and your partner refuses to that suit, do not play the king, because if the leader of that suit, or his partner, have the long trump, you risk losing three tricks to get one.

2. Suppose your partner has ten cards remaining, and it appears to you that they consist of trumps and one suit only ; and you should have king, ten, and one small card of his strong suit, with queen and two small trumps ; in this case, you are to judge he has five cards of each, and therefore you are to play out the king of his strong suit ; and if you win that trick, next throw out the queen of trumps ; should that likewise come home, proceed to play trumps : this method may be made use of at any score of the game, except at 4 and 9.

3. *The trump turned up to be remembered.*—It is necessary that the trump turned up should be remembered, both by the dealer and his partner. The dealer should always so place that card, as to be certain ; for suppose it to be only a five, and that the dealer has two more, *viz.* the six and nine, if his partner trump out with ace and king, he ought to play his six and nine ; because, supposing your partner had ace, king, and four small trumps, by knowing you have the five remaining, you may win many tricks.

4. Your right-hand adversary leads a suit of which you have the ten and two small ones ; the third hand puts on the knave, your partner wins

it with the king ; when your adversary leads that suit again, and plays a small one, put on your ten, because it may save your partner's ace, upon supposition that your right-hand adversary led from the queen.

5. Suppose you have the best trump, and the adversary A has one trump only remaining, and that it appears your adversary B has a great suit ; in this case, though you permit A to make his trump, yet by keeping the trump in your hand, you prevent B from taking his great suit ; whereas, if you had taken out A's trump, it had made only one trick difference ; but by this method you probably save three or four tricks.

6. *The following case happens frequently.*—That you have two trumps remaining when your adversaries have only one, and it appears your partner has one great suit ; in this case always play a trump, because, by removing the trump out of your adversary's hand, there can be no obstruction to your partner's suit.

7. Suppose you have three trumps when no one else has any, and have only four cards of any certain suit remaining ; in this case play a trump, which shows your partner that you have all the trumps, and also gives a fair chance for one of your adversaries to throw away a card of the suit : by which means, supposing that suit to have been once led, and one thrown away, making five, four remaining in your hand making nine, and there being only four left between three hands, and your partner having an equal chance to hold a better card in that suit than the last player, it follows, that you have an equal chance to make three tricks in the suit, which probably could not otherwise have been done.

8. Suppose you have five trumps, and six small

cards of any suit, and are to lead ; lead from that of which you have six, because, as you are deficient in two suits, your adversary will probably trump out, which is playing your own game for you ; whereas, had you begun with playing trumps, they would force you, and consequently destroy your game.

PLAYING SEQUENCES FARTHER EXPLAINED.

1. In trumps play the highest, unless you have ace, king, and queen ; then play the lowest, in order to let your partner into the state of your game.

2. In suits not trumps, if you have a sequence of king, queen, and knave, and two small ones ; whether you are strong in trumps or not, it is best to begin with the knave, because, by getting the ace out of any hand, you make room for the whole suit.

3. In case you are strong in trumps, supposing you have a sequence of queen, knave, ten ; or knave, ten, nine, and two small cards of any suit ; play the highest of the sequence, because, if either of the adversaries should trump that suit in the second round, you, by being strong, may fetch out their trumps, and make the remainder of the suit.

4. If you have a sequence of king, queen, knave, and one small card of any suit, whether you are strong in trumps or otherwise, play your king, and do the same by any inferior sequences, if you have only four of the suit in number.

5. When you are weak in trumps, always begin with the lowest of the sequence, if you have five in number ; for, suppose your partner

to have the ace of that suit, he then makes it. If you have the ace and four small cards of any suit, and are weak in trumps, and lead from that suit, play the ace; if very strong in trumps, you may play your game as backward as you please; but if weak in trumps, you must play the reverse.

6. Being strong in trumps means, if you have ace, king; or king, queen; or queen, knave; or queen, ten; or knave, ten, and three small trumps; or queen, or knave, and four small trumps.

In any of these cases, you may be understood to be very strong in trumps, and may therefore play by the foregoing rules, being morally assured of having the command.

If you have two or three small trumps only, you are weak in them.

7. Having ace, king, queen, or knave, and three small trumps, entitles you to force your partner at any point of the game.

8. If, by accident, either you or the adversaries have forced your partner (though you are weak in trumps), should he have had the lead, and not trumped out, force him as often as the lead comes into your hand, unless you have good suits of your own to play.

9. If you have only two or three small trumps, and your right-hand adversary should lead a suit of which you have none, trump it, which is an information to your partner that you are weak in trumps.

10. Suppose you have an ace, knave, and one small trump, and your partner trumps to you from the king and three small ones, and suppose your right-hand adversary has three trumps, and your left-hand adversary the like number, in this case, by finessing your knave, and playing your ace, if the queen be on your right hand, you win

a trick ; but if the queen should be on your left hand, and you should play the ace, and then return the knave, admitting your left-hand adversary to put on the queen, which he ought to do, it is above 2 to 1 that one of the adversaries has the ten, and you thus gain no tricks.

11. Should your partner have led from the ace, and you have king, knave, and one small trump, by putting on your knave, and returning the king, it answers exactly the purpose of the former rule.

In other suits practise the same method.

12. Should you be strong in trumps, and have king, queen, and two or three small cards in any other suit, lead a small one, it being 5 to 4 that your partner has an honour in that suit, but if weak in trumps, begin with the king.

13. Should your right-hand adversary lead a suit of which you have king, queen, and two or three small cards, you, being strong in trumps, may pass it, because it is an equal wager that your partner has a better card than the third hand ; if not by your strength in trumps, you need not fear making that suit.

14. If your right-hand adversary lead a suit of which you have king, queen, and one small card, whether in trumps or not, play the queen ; if you have queen, knave, and one small card, put on the knave ; and if you have knave, ten, and one small card, the ten : by putting up the lower one of the two, your partner expects you have a better card or cards in the same suit : and by the calculations annexed to this treatise, he may judge what are the odds for or against him.

15. When you have ace, king, and two small cards in any suit, being strong in trumps ; if your

right-hand adversary lead that suit, you may pass it as directed in rule 13.

16. If you have the ace, nine, eight, and one small trump, and your partner should lead the ten; pass it, because, unless the three honours lie behind you, you are sure of making two tricks; do the like, if you have the king, nine, eight, and one small trump; or the queen, nine, eight, and one small trump.

17. If your right-hand adversary lead from a suit of which you have ace, king, and queen, or ace, king, and knave, put on the ace; because that encourages the adversaries to play the suit again; and though you deceive your partner by this method, you also deceive your adversaries, which is of greater consequence; because, if you had put on the lowest of the tierce-major, or the knave, your right-hand adversary would have discovered that the strength of that suit was against him, and consequently would have changed suits.

18. Suppose you have ace, ten, and one small card, in any suit; also the ace, nine, and one small card of another, lead from the last suit: it being an equal wager that your partner has a better card in that suit than the last player; or suppose that your right-hand adversary leads from the king or queen of the suit of which you have the ace, ten, and one small card; in that case it is an equal chance that your partner has a better than the third hand; if that happen to be the case, upon the return of the suit, you lie tenace, and consequently may win three tricks.

19. *A case to demonstrate the tenace.*—Suppose A and B to play at two-handed whist, and A to have the ace, queen, ten, eight, six, and four of

clubs, which, in case B always leads, are six sure tricks. Let us suppose he has the same hand in spades, which, in case B always leads, are six more sure tricks. We imagine B has the remainder of these two suits.

Suppose B to have the same hand in hearts and diamonds as A has in spades and clubs, and that A has the remainder of the hearts and diamonds, which, in case A always leads, are twelve sure tricks to B.

The foregoing case shows that both hands are exactly equal; and, therefore, let one of them name his trumps, and lead, he wins thirteen tricks only. But if one name the trumps, and the other lead, he that names the trumps ought to win fourteen tricks.

He who would play whist to perfection must not be content only with being a master of the calculations contained in this treatise, and an exact judge of all the general and particular cases mentioned in it; but he must be a very punctual observer of such cards as are thrown away, both by his partner and adversaries.

ADDITIONAL CASES.

1. When it appears, that the adversaries have three or four trumps remaining, and that neither you nor your partner have any, never attempt to force one hand to trump, and to let the other throw away a losing card, but endeavour to find out a strong suit in your partner's hand, in case you have none in your own; by which means you prevent them from making their trumps separate.

2. Suppose A and B are partners against C and

D, and nine rounds played ; and also that eight trumps are out ; and further, suppose A has one trump only, and his partner B the ace and queen, and the adversaries C and D have the king and knave of trumps between them. A leads his small trump, C plays the knave. B should play his ace of trumps upon the knave ; because D having four cards remaining, and C only three, it is 4 to 3 in B's favour that the king is in C's hand : reduce the number of four cards to three, the odds then are 3 to 2 : and reduce the number of three cards in a hand to two, and the odds then are 2 to 1 in favour of B's winning another trick, by putting on his ace of trumps. By the same rule play all the other suits.

3. Suppose you have the thirteenth trump, and also the thirteenth card of any other suit, and one losing card, play the losing card ; because, if you play the thirteenth card first, the adversaries, knowing you to have one trump remaining, may not pass your losing card, and therefore you play 2 to 1 against yourself.

4. Suppose you have the ace, king, and three small cards, in any suit not played, and that it appears your partner has the last trump remaining, lead a small card in that suit, because it is an equal chance that your partner has a better card in it than the last player ; if so, and there be only three cards in that suit in any one hand, you win five tricks ; whereas, if you play the ace and king, it is 2 to 1 that your partner does not hold the queen, and consequently you win only two tricks. This method may be taken in case all the trumps are played out, provided you have good cards in other suits to bring in this ; and observe you reduce the odds of 2 to 1 against you

to an equal chance by this method, and probably gain three tricks by it.

5. If you wish to have trumps played by the adversaries, and your partner should have led a suit of which you have the ace, knave, ten, nine, and eight, or the king, knave, ten, nine, and eight, play the eight; which will probably induce the adversary, if he win that card, to play trumps.

6. Suppose you hold a quart-major in any suit, with one or two more of the same, and wish to inform your partner you have the command, in that case throw away the ace upon any suit of which you have none, because the odds are that neither of the adversaries have more than three in that suit: take the same method if you have a quart to a king; the ace being out, throw away the king; also if you have a quart to a queen, the ace and king being played, throw away your queen; all which lets your partner into the state of your game; and you should play by the same rule in all inferior sequences, having the best of them in your hand.

7. A moderate player, in case the king is turned up on the left, and he has the queen and one small trump only, often plays out the queen, in hopes his partner may win the king if put on, not considering that it is about 2 to 1 that his partner has not the ace, and admitting he has, it is playing two honours against one, and consequently weakening their game. The necessity only of playing trumps should induce him so to play.

8. *A case which frequently happens.*—A and B are partners against C and D, and all the trumps played out except one, which C or D has; A has three or four winning cards of a suit already played, with an ace and one small card of ano-

ther : A's best play is to throw away one of his winning cards ; because, if his right-hand adversary play to his ace suit, he has it in his power to pass it, and his partner has an equal chance to have a better card in that suit than the third hand : if so, and B have any forcing card, or one of his partner's suit to play to, in order to force out the last trump, A's ace remaining in his hand brings in his winning cards ; whereas, if A had thrown away the small card to his ace-suit, and his right-hand adversary had led that suit, he had been obliged to put on his ace, and consequently had lost some tricks by that method.

9. Suppose ten cards played out, and it appears probable that your left-hand adversary has three trumps remaining, *viz.* the best and two small one ; and you have two trumps only, and your partner none, and your right-hand adversary plays a thirteenth or some other winning card, in that case pass it, by which you may gain a trick, because the left-hand adversary must trump.

10. To inform your partner of the state of your game, suppose you have a quart-major in trumps (or any other four best trumps), if obliged to trump, play the highest of any four best trumps, and then the lowest, which clears up your game, and may be the means of winning many tricks : practise the same in all other suits.

11. If your partner call at the point of 8 before his time, trump to him, whether you are strong or not ; because as he calls before he is obliged, it is a declaration of being strong in trumps.

12. Suppose your right-hand adversary turns up the queen of clubs, and when he has the lead, plays the knave, and also that you have the ace, ten, and one club more, or the king, ten, and one

small card ; when he leads his knave, do not win it, because it is an equal wager, you not having the king or ace, that your partner has it, and consequently you may gain a trick by passing the knave, which cannot be done if you either put on your king or ace of clubs.

13. *A case for a slam.*—Suppose A and B partners against C and D ; and that C deals. A has king, knave, nine, and seven of clubs, being trumps ; a quart-major in diamonds, a tierce-major in hearts, and the ace and king of spades. B has nine diamonds, two spades, and two hearts, D has the ace, queen, ten, and eight of trumps, with nine spades. And C five trumps, and eight hearts. A leads a trump, which D is to win, and D plays a spade, which C is to trump ; C leads a trump which his partner D wins ; then D leads a spade, which C is to trump ; and C plays a trump, which D is to win ; and D having the best trump, is to play it ; which done, D having seven spades in his hand, wins them, and consequently slams A and B.

14. If your partner lead the king, and you have none of that suit, pass it, by throwing away a losing card, unless your right-hand adversary has put on the ace.

15. Suppose your partner leads the queen, and your right-hand adversary wins it with the ace, and returns that suit, in case you have none of it, do not trump, except you play for an odd trick, or are weak in trumps, but throw away a losing card, which makes room for your partner's suit.

16. Suppose you have the ace, king, and one small card, and your left-hand adversary leads that suit, and suppose you have four small trumps, and no suit of consequence to lead from, and your

right-hand adversary should put on the nine, or any lower card ; in this case win it with the ace, and by playing the small card of that suit, return the lead upon the adversary, who will have reason to judge that the king lies behind him, and consequently will not play his queen if he should have it ; by this method you have a fair probability of winning a trick, and at the same time of letting your partner into the state of your game.

17. If your partner force you to trump a card early in the deal, you are to suppose him strong in trumps, except at the points of 4 to 9 ; and, therefore, if you are strong in trumps, play them.

18. Suppose you call at the point of 8, and your partner has no honour : and you should have the king, queen, and ten; the king, knave, and ten ; or the queen, knave, and ten of trumps ; when trumps are played, always put on the ten, which demonstrates to your partner that you have two honours remaining.

19. Suppose your right-hand adversary calls at the point of 8, and his partner has no honour ; and you should have the king, nine, and one small trump, or the queen, nine, and two small trumps ; when trumps are led by your partner, put on the nine, because it is about 2 to 1 that the ten is not behind you.

20. If you lead a suit, of which you have the ace, king, and two or three more, when you play the ace, if your partner play the ten or knave, and you should have one single card of any other suit, and two or three small trumps only : in this case lead the single card, to establish a saw ; for your partner has an equal chance to have a better card in that suit, than the last player ; whereas, had he led that to you, which probably was his

strong suit, the adversaries would discover your attempt to establish a saw, and trump out.

21. Suppose you have the ace and deuce of trumps, and are strong in the three other suits ; if you have to lead, play the ace, and next your deuce, in order to put the lead into your partner's hand, to take out two trumps for one ; also, suppose the last player wins that trick, and that he leads a suit of which you have the ace, king, and two or three more, pass it, because it is an equal wager that your partner has a better card in that suit than the third hand ; if so, he will have an opportunity of taking out two trumps to one ; when the lead comes into your hand, endeavour to force out one of the two trumps remaining, supposing eleven are played out, and the odds are that your partner has one of the two remaining.

22. Suppose ten rounds are played, and you have the king, ten, and one small card of any suit, which has never been led ; and have won six tricks, and your partner leads from that suit, and that there is neither a trump or thirteenth card in any hand ; in this case, unless your right-hand adversary puts on so high a card as obliges you to play the king, do not put it on, because upon the return of that suit you make your king, and consequently the odd trick, which makes two difference : if there happen to be only nine cards played out, in the like circumstance, play by the same rule. This method is always to be taken, unless gaining two tricks gives you a chance either to save your lurch or to win or save the game.

23. Suppose A and B partners against C and D, and B holds the two last trumps, also the queen, knave, and nine of another suit ; and suppose A has neither the ace, king, or ten of that

suit, but is to lead. B should play the nine, because it is only 5 to 4 against him that his left-hand adversary holds the ten; and if he play either the queen or knave, it is about 3 to 1 the ace or king is in his left-hand adversary's hands, and consequently he reduces the odds of 3 to 1 against him, to 5 to 4 only.

24. Vary the foregoing; put the king, knave, and nine of a suit into B's hand, and suppose that A has neither ace, queen, or ten; when A leads that suit, it is equal whether B plays his king, knave, or nine.

25. Suppose you have ace, king, and three or four small cards of a suit not played, and it appears your partner has the last trump; in this case, if you have to lead, play a small card in that suit, it being an equal wager that your partner has a better than the last player; and if so, it is probable you may make five or six tricks in that suit; but if you play out ace and king, it is 2 to 1 that your partner has not the queen, and consequently that you make only two tricks, by which you risk the losing of three or four tricks to secure one only.

26. If your partner lead ace of a suit in which he has the ace, queen, knave, and more, and then plays his queen; in case you have the king and two small cards in that suit, win his queen with the king; and if strong in trumps, by clearing the board of them, having a small card of your partner's great suit, you gain many tricks.

HOW TO PLAY FOR AN ODD TRICK.

1. SUPPOSE you are elder hand, and have the ace, king, and three small trumps, with four small cards of another suit, three small cards of the third, and one small card of the fourth suit: lead the single card, which, if won by the last player, will

put him upon playing trumps, or to your weak suit ; in which case you gain the tenance.

2. Suppose your partner is to lead, and that he plays the ace of the suit of which you have only one, and proceeds to play the king of the same, and that your right-hand adversary trumps it with the queen, knave, or ten ; do not overtrump him, but throw away a small card of your weakest suit ; because it makes your partner the last player, and gives him the tenance in your weak suits.

UPON SUPPOSITION YOU WANT FOUR OR FIVE POINTS, AND ARE ELDER HAND.

1. PLAY a small trump, and should your partner have a better trump than the last player, and return the lead, put on the king, and then proceed to play the suit of which you have four in number.

These examples attended to, on all parts of the game, are of great consequence to the player : because when he has no good suit to lead, his partner being the last player gains the tenace in his weak suits.

2. A and B are partners against C and D, twelve trumps are played out, and seven cards only remain in his hand, of which A has the last trump, and also the ace, king, and four small cards of a suit. A ought to play a small card of that suit, because it is an equal wager, that his partner has a better card in it than the last player ; and in this case, if four cards of that suit should happen to be in either of the adversaries' hands, he will be able to make five tricks, when if he played off his ace and king, he would have made only two. If neither of the adversaries have more than three cards in that suit, A has an equal chance to win the six tricks in it.

3. Suppose A and B are partners against C and

D, and that eight trumps are played out, and that A has four of those remaining, C having the best trump, and to lead, C ought not to play his trump to take out one of A's, because he would leave three trumps in A's hand; but in case A's partner has any great suit to make, C, keeping the trump in his own hand, can prevent him from making that suit by trumping it.

4. *A case of curiosity.*—Suppose three hands of cards, containing three cards in each hand; let A name the trumps, and let B choose which hand he pleases, A, having his choice of either of the other two hands, wins two tricks.

Clubs are to be trumps.

First hand, ace, king, and six of hearts.

Second hand, queen, and ten of hearts, and ten of trumps.

Third hand, nine of hearts, and two and three of trumps.

The first hand wins of the second. The second of the third. And the third of the first.

THE LAWS OF WHIST.

OF DEALING.

1. If a card be turned up in dealing, the adverse party may call a new deal; but if either of them have been the cause of turning up such card, in that case the dealer has his option.

2. If a card be faced in the deal, there must be a new deal, unless it is the last card.

3. Every person ought to see that he has thirteen cards dealt to him; therefore, if any one should

happen to have only twelve, and not find it out till several tricks are played, and the rest of the players have their right number, the deal stands good; and also the person who plays with twelve cards is to be punished for each revoke he may have made; but if any of the players should happen to have fourteen cards, in that case the deal is lost.

4. The dealer ought to leave in view upon the table his trump card, till it is his turn to play; and after he has mixed it with his other cards, nobody is entitled to demand what card is turned up, but may ask what is trumps, whereby the dealer cannot name a wrong card, which otherwise he might have done.

5. None of the players ought to take up or look at their cards while any person is dealing; and if the dealer should happen to miss deal, in that case he shall deal again, unless it arises from his partner's fault; and if a card be turned up in dealing, no new deal shall be called, unless the partner has been the cause of it.

6. If the dealer, instead of turning up the trump, should put the trump card upon the rest of his cards, with the face downward, he is to lose the deal.

OF PLAYING OUT OF TURN.

7. If any person play out of his turn, the card so played may be called at any time in that deal, provided it does not cause a revoke; or either of the adversaries may require of the person who ought to have led, to play the suit the adversary may choose.

8. A and B are partners against C and D; A plays the ten of a suit, the adversary C plays the knave of the same, B plays a small card of the same, but before D plays, his partner C leads

another card: the penalty shall be in the option of A or B to oblige D to win the trick if he can.

9. A and B are partners against C and D; A leads a club, his partner B plays before the adversary C; in this case D has a right to play before his partner C; because B played out of his turn.

10. If any card be led, and the last player should play out of his turn, whether his partner has any of the suit led or not, provided he is not made to revoke, he is neither entitled to trump it, nor to win the trick.

OF REVOKING.

11. If a revoke happen to be made, the adversaries may add 3 to their own score, or take three tricks from the revoking party, or take down 3 from their score; and the revoking party, provided they are up, notwithstanding the penalty, must remain at 9: the revoke takes place of any other score of the game.

12. Should any person revoke, and discover it before the cards are turned, the adverse party may call the highest or lowest card of the suit led, or have their option to call the card then played, at any time when it does not cause a revoke.

13. No revoke can be claimed till the trick is turned and quitted, or the party who revoked, or his partner, has played again.

14. If a revoke be claimed, the adverse party are not to mix their cards, upon forfeiture of the revoke.

15. No revoke can be claimed after the cards have been cut for a new deal.

OF CALLING HONOURS.

16. If a player call at any point of the game, except 8, either of the adverse parties may demand a new deal; and they are at liberty to consult each other whether they will have a new deal.

17. After the trump is turned up, no person must remind his partner to call, on penalty of losing a point.

18. If the trump card be turned up, no honours in the preceding deal can be reckoned, unless they were before claimed.

19. Should any person call at the point of 8, and his partner answer, and both the opposite parties have thrown down their cards, and it appears that the other side had not two by honours; in this case the adversaries may consult with one another, and are at liberty to stand the deal or not.

20. And if any person answer when he has not an honour, the adverse party may consult each other, and are at liberty to stand the deal or not.

21. If any person call at 8, after he has played, the adversaries may call a new deal.

OF SEPARATING AND SHOWING THE CARDS.

22. If any person separate a card from the rest, the adverse party may call it, provided they name it; but in case of calling a wrong card, they are liable for once to have the highest or lowest card called in any suit led during the deal.

23. If any person throw his cards upon the table, with their faces upwards, upon supposition

that he has lost the game, the adversaries have it in their power to call any of their cards when they think proper, provided they do not make the party revoke, and he is not to take up his cards again.

24. If any person be sure of winning every trick, he may show his cards upon the table; but he is then liable to have all his cards called.

OF OMITTING TO PLAY TO A TRICK.

25. A and B are partners against C and D: A leads a club, C plays the ace, B plays a club, and D, partner to C, takes up the trick without playing any card; A and the other players play on, till it appears D has one card more than the rest; it is in the option of the adversaries to call a new deal.

RESPECTING WHO PLAYED ANY PARTICULAR CARD.

26. Each person in playing ought to lay his card before him; after doing so, if either of the adversaries mix his cards with the player's who pursued this method, his partner is entitled to insist that each person lay his card before him; but not to inquire who played any particular card.

A DICTIONARY FOR WHIST, RESOLVING ALMOST ALL THE CRITICAL CASES THAT MAY HAPPEN.

1. How to play trumps to the greatest advantage?

Peruse the treatise of Whist, case 11, page 95, and all the following cases under that and the next head.

2. How to play sequences when trumps?

Ans. You are to begin with the highest of them.

3. How to play sequences when they are not trumps?

Ans. If you have five, begin with the lowest; if three or four in number, always play the highest.

4. Why do you prefer playing sequences rather than other suits?

Ans. Because they are the safest leads, and gain the tenace in other suits.

5. When ought you to make tricks early?

Ans. When you are weak in trumps.

6. When ought you not to make tricks early?

Ans. When you are strong in trumps.

7. When do you play from an ace-suit?

Ans. You do so when you have three in number only in any suit (trumps excepted.)

8. When do you not play from an ace-suit?

Ans. You ought not to lead from an ace-suit, having four or more in number in any other suit, because the ace is an assistant to your great suit, and, when trumps are out, enables you to make that suit.

9. When any card of consequence is turned up on your right or left hand, how are you to play? See case 1, page 107, and case 1, page 111.

10. Why are you always to play your hand by your own and adversaries' scores?

Ans. Case 6, page 94. See references in this case.

11. How are you to know when your partner has no more of the suit played? Cases 1, 2, 3, page 109.

12. Reasons for putting on or not at second-

hand the king, queen, knave, ten. Cases 1, 2, 3, page 109.

13. Why are you to play the queen, knave, or ten of any suit, when that suit is played a second time, having three in number only? Case 4, page 115.

14. When ought you to over-trump your adversary, and when not?

Ans. When you are weak in trumps you ought to over-trump him : but if strong in trumps you ought to throw away a losing card.

15. Reasons for not parting with the command of your adversary's strong suit, case 1, page 114.

16. If your right-hand adversary leads a suit of which you have the ace, king, and queen, why are you to put on the ace, preferably to the queen?

Ans. Because it deceives the adversary, which, in this case, is preferable to informing your partner.

17. To declare your strong suit, when is it proper to be done, and when not?

Ans. When you have only one strong suit, and you trump out to make the same, in that case you ought to declare it ; but if you are strong in all suits, there is no necessity of declaring your strongest.

18. The ace turned up on your right-hand, and that you have the ten and nine only of trumps, why do you play the ten? Case 1, page 111.

19. Why do you play from a king-suit preferably to a queen-suit, having the same number of each?

Ans. Because it is 2 to 1 that the ace does not lie in your left-hand adversary's hands, and it is 5 to 4, if you lead from a queen-suit, that the ace

or king lies in his hands, and that you lose your queen, and so play to a disadvantage.

20. Why do you play from a queen-suit preferably to a knave-suit.

Answered case 19.

21. When you have the four best cards of any suit, why do you throw away the best?

Ans. To tell your partner the state of the game.

22. How are you to make the most of your partner's strong suit?

At pages 103, 104, 105, are six examples to demonstrate it.

23. The queen turned up on your right hand, you have the ace, ten, and one trump, or the king, ten, and one trump; if the right-hand adversary should play the knave, how are you to play?

Ans. You are to pass it, by which you have an equal wager of gaining a trick, and cannot lose by so doing.

24. Four cards are played out, and trumps have gone round twice, your partner not appearing to have any higher trump than the eight, yet he has three trumps: when he plays his third trump, the next hand puts on the knave, there being the king only in the adversary's hand, you having the ace and queen of trumps: *Quære*, Are you to play the ace or queen?

Ans. You are to play the ace, because it is 5 to 8 that the last player has the king; and if you reduce the cards to two in number, it is then 2 to 1 in your favour, by playing the ace, that the king falls: this method may be taken in other suits upon similar occasions.

EXAMPLE. Suppose that you have only two cards remaining in your hand of any suit, *viz.* the

queen and ten; and the knave and nine of the same suit are in your adversary's hands, when your partner leads that suit, your right-hand adversary plays the nine, and has one card only remaining; you ought then to play the queen, because it is 2 to 1 that your left-hand adversary has the knave; and in all cases of the same nature follow this rule.

N.B. That the dealer at whist holds four trumps or more is 232 to 165, or about a guinea to 4s. 11*½*d.

AN EXPLANATION OF THE TECHNICAL WORDS.

FINESSING, means endeavouring to gain an advantage thus: When a card is led, and you have the best and third best of that suit, you put your third best card upon that lead, and run the risk of your left-hand adversary having the second best; if he have it not, which is 2 to 1 against him, you are then sure of gaining a trick.

FORCING, means obliging your partner or adversary to trump a suit, of which he has none. The cases mentioned in this treatise will show when it is proper to force either of them.

LONG TRUMP, means having one or more trumps in your hand, when all the rest are out.

LOOSE CARD, is a card of no value, and, consequently, the properest to throw away.

POINTS, ten of them make a game; as many as are gained by tricks or honours, so many points are set up to the score.

QUART, is a sequence of any four cards immediately following one another in the same suit.—*Quart-major* is a sequence of ace, king, queen, and knave.

QUINT, is a sequence of any five cards imme-

dately following one another in the same suit.—*Quint-major* is a sequence of ace, king, queen, knave, and ten.

RENOUNCE, without a card of any particular suit.

REVERSE, means only playing in a different manner: that is, if you are strong in trumps, you play one way; if weak in trumps, you play the *reverse*, viz. another.

RUFF and OVER-RUFF, to trump a suit led, second or third hand.

SEE-SAW, is when each partner trumps a suit, and plays those suits to one another for that purpose.

SCORE, is the number of points set up, ten of which make a game.

SLAM, is when either party wins every trick.

TENACE, is having the first and third best cards, and being last player, and consequently catching the adversary when that suit is played: as, for instance, in case you have ace and queen of any suit, and your adversary leads, you must win those two tricks; and so of any other tenace in inferior cards.

TERCE or Tierce, is a sequence of any three cards immediately following one another in the same suit. *Terce-major* is a sequence of ace, king, and queen.

AN ARTIFICIAL MEMORY FOR PLAYERS.

1. **PLACE**, of every suit in your hand, the worst to the left, and the best (in order) to the right; and the trumps (in order) always to the left of all the other suits.

2. If in play you have the best card remaining

in any suit, put the same to the left of your trumps.

3. And if you possess the second best card of any suit, place it on the right of your trumps.

4. And if you have the third best card of any suit, place a small card of that suit between the trumps and that third best, to the right of the trumps.

5. To remember your partner's first lead, place a small card of that suit in the midst of your trumps, and if you have but one trump, on the left of it.

6. When you deal, put the trump turned up to the right of all your trumps, and keep it as long as you can, that your partner may, knowing you have that trump left, play accordingly.

7. *To find where your Adversaries Revoke.*— Suppose two suits on the right-hand to represent your adversaries in the order they sit, as to your right and left-hand. When you suspect either of them to have made a revoke, clap a small card of that suit amongst the cards representing that adversary, by which you record not only that there may have been a revoke, but also who made it, and in what suit.

If the suit, representing the adversary that made the revoke, happen to be revoked in, change that for another, and put a small card of the suit revoked in the middle of that exchanged suit, and if you have not a card remaining of that suit reverse a card of any other (except diamonds) and place it there.

8. As you have a way to remember your partner's first lead, you may also record in what suit either of your adversaries made their first lead, by putting the suit so led in the place which in your hand represents that adversary; and if other

suits were already placed to represent them, then exchange those for the suits in which each of them makes his first lead.

The foregoing method is to be taken when more necessary to record your adversary's first lead than to endeavour to find out a revoke.

CALCULATIONS SHEWING THE CHANCES OF YOUR PARTNER HAVING ONE, TWO, OR THREE CERTAIN CARDS.

Read with attention those marked N.B.

1. WHAT is the chance of your friend having one certain card?

Answer.	Against him.	For him.
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That he has it not, is N.B 2 to 1

2. What is the chance of having two certain cards?

Answer.

That he has one of them only, is..... 31 to 26

That he has not both of them 17 to 2

But that he has one or both, is about

5 to 4, or N.B..... 25 to 32

3. What are the chances of having three certain cards?

Answer.

That he holds one of them only, is 325

for him to 378 against him, or about 6 to 7

That he has not two of them only, is 156

for him to 547 against him, or about 2 to 7

That he has not all three of them, is 22

for him to 681 against him, or about 1 to 31

Against For
him. him.

But that he has one or two of them, is		
481 for him to 222 against him, or		
about 13 to 6		
And that he has one, two, or all three of them, is about N.B. 5 to 2		

EXPLANATIONS AND APPLICATION OF THE CALCULATIONS.

First Calculation.

It is 2 to 1 that your partner has not one certain card.

To apply this, suppose the right-hand adversary leads a suit, of which you have the king and one small card only ; observe that it is 2 to 1, by putting on your king, that the left-hand adversary cannot win it.

If you have the king and three small cards of any suit, likewise the queen and three small cards of another ; lead from the king, because it is 2 to 1 that the ace does not lie behind you ; but 5 to 4 that the ace or king of any suit lies behind, and consequently, by leading from the queen, you play to disadvantage.

Second Calculation.

It is 5 to 4, at least, that your partner has one out of any two certain cards ; the like odds are in favour of your adversaries ; therefore, suppose you have two honours of any suit, and knowing it is 5 to 4 that your partner holds one of the other two, you play your game to a greater certainty.

Again, suppose you have the queen and one small card only, in any suit, and that your right-hand adversary leads the same, if you put on your queen, it is 5 to 4 that your left-hand adversary can win it, and therefore you play to disadvantage.

Third Calculation.

It is 5 to 2 that your partner has one out of any three certain cards.

Therefore, suppose you have the knave and one small card, and that your right-hand adversary leads from that suit, it is 5 to 2 that your left-hand adversary has either ace, king, or queen of the same; if you put on the knave, you play against yourself; besides, by making a discovery your right-hand adversary finesses upon your partner throughout that whole suit.

To explain the necessity of putting on the lowest of sequences, suppose that your adversary led a suit of which you have the king, queen, and knave, or queen, knave, and ten; by putting on your knave of one suit, or your ten of the other, it gives your partner an opportunity of calculating the odds in that, and also in all inferior suits of which you have sequences.

Suppose you have the ace, king, and two small trumps, with a quint-major or five other winning cards in any other suit, and have played trumps two rounds, and each person followed suit; in this case there are eight trumps out, and two remaining in your hand, which make ten, and three trumps divided between the remaining three players, of which it is 5 to 2 that your partner has one, and, therefore, out of seven cards in your hand, you ought to win five tricks.

SOME COMPUTATIONS FOR LAYING WAGERS.

All with the deal.

The deal is	21 to 20
1 love is	10 to 9
2	5 to 4
3	7 to 10
4	5 to 3
5 is 2 to 1 of the game, and 1 of the lurch	2 to 1
6 is.....	5 to 2
7	10 to 3
8	5 to 1
9 is about	9 to 2
<hr/>	
2 to 1 is	9 to 8
3 to 1	9 to 7
4 to 1	9 to 6
5 to 1	9 to 5
6 to 1	9 to 4
7 to 1	3 to 1
8 to 1	9 to 2
9 to 1 is about	4 to 1
<hr/>	
3 to 2 is	8 to 7
4 to 2	4 to 3
5 to 2	8 to 5
6 to 2	2 to 1
7 to 2	8 to 3
8 to 2	4 to 1
9 to 2	7 to 2
<hr/>	
4 to 3 is	7 to 6
5 to 3	7 to 5
6 to 3	7 to 4
7 to 3	7 to 3
8 to 3	7 to 2
9 to 3 is about	3 to 1
<hr/>	

COMPUTATIONS FOR LAYING WAGERS—*continued.*

5 to 4 is	6 to 5
6 to 4	6 to 4
7 to 4	2 to 1
8 to 4	3 to 1
9 to 4 is about	5 to 2
<hr/>	
6 to 5 is	5 to 4
7 to 5	5 to 3
8 to 5	5 to 2
9 to 5 is about	2 to 1
<hr/>	
7 to 6 is	4 to 3
8 to 6	2 to 1
9 to 6 is about	7 to 4
<hr/>	
8 to 7 is about	3 to 2
9 to 7 is about	12 to 8
<hr/>	
9 to 8, with or without the deal, in favour of 8, 7 to 5	7 to 5

MR. PAYNE'S MAXIMS FOR WHIST.

LEADER.

1. BEGIN with the suit of which you have most in number. *For when the trumps are out, you will probably make several tricks in it.*
2. If you hold equal numbers in different suits, begin with the strongest. *Because it is the least liable to injure your partner.*
3. Sequences are always eligible leads. *At supporting your partner without injuring your own hand.*



4. Lead from a king or queen, rather than from an ace. *For since the adversaries will lead from those suits which you do not, your ace will do them most harm.*

5. Lead from a king rather than from a queen, and from a queen rather than a knave. *For the stronger the suit, the less is your partner endangered.*

6. Lead not from ace-queen, or ace-knave, till necessary. *For if that suit be led by the adversaries, you have a good chance of making two tricks in it.*

7. In all sequences to a queen, knave, or ten, begin with the highest. *Because it will frequently distress your left-hand adversary.*

8. Having ace, king, and knave, lead the king. *For if strong in trumps, you may wait the return of that suit, and finesse the knave.*

9. Having ace, king, and one small card, lead the small one. *For by this lead your partner has a chance to make the knave.*

10. Having ace, king, and two or three small cards, play ace and king if weak, but a small card if strong in trumps. *For when strong in trumps, you may give your partner the chance of making the first trick.*

11. Having king, queen, and one small card, play the small one. *For your partner has an equal chance to win, and you need not fear to make king or queen.*

12. Having king, queen, and two or three small cards, lead a small card if strong, and the king if weak in trumps. *For strength in trumps entitles you to play a backward game, and gives your partner the chance of winning the first trick; but if weak in trumps, lead the king or queen to secure a trick in that suit.*

13. Having an ace with four small cards, and no other good suit, play a small card, if strong in trumps, and the ace if weak. *For strength in trumps may enable you to make one or two of the small cards, although your partner cannot support the lead.*

14. Having king, knave, and ten, lead the ten. *For if your partner hold the ace, you have a good chance to make three tricks, whether he passes the ten or not.*

15. Having king, queen, and ten, lead the king. *For if it fail, by putting on the ten upon the return of that suit from your partner, you have a chance of making two tricks.*

16. Having queen, knave, and nine, lead the queen. *For upon the return of that suit from your partner, by putting on the nine you will probably make the knave.*

SECOND HAND.

1. Having ace, king, and small ones, play a small card, if strong in trumps, but the king, if weak in them. *For otherwise, your ace or king might be trumped in the latter case, and no hazards should be run with few trumps but in critical cases.*

2. Having ace, queen, and small cards, play a small one. *For upon the return of that suit, you will probably make two tricks.*

3. Having ace, knave, and small cards, play a small one. *For upon the return of that suit, you will perhaps make two tricks.*

4. Having ace, ten, or nine, with small cards, play a small one. *For by this method, you have a chance of making two tricks in the suit.*

5. Having king, queen, ten, and small cards, play the queen. *For by playing the ten upon the*

return of the suit, you will probably make two tricks in it.

6. Having king, queen, and small cards, play a small card, if strong in trumps, but the queen, if weak in them. *For strength in trumps warrants playing a backward game, and it is always advantageous to keep back your adversaries' suit.*

7. If you hold a sequence to your highest card in the suit, play the lowest of it. *For by this means your partner is informed of your strength.*

8. Having queen, knave, and small ones, play the knave. *Because you will probably secure a trick.*

9. Having queen, ten, and small ones, play a small one. *For your partner has an equal chance to win.*

10. Having either ace, king, queen, or knave, with small cards, play a small one. *For your partner has an equal chance to win the trick.*

11. Having either ace, king, queen, or knave, with one small card only, play the small one. *For otherwise, the adversary will finesse upon you.*

12. If a queen be led, and you hold the king, put that on. *For if your partner hold the ace, you do no harm; and if the king be taken, the adversaries have played two honours to one.*

13. If a knave be led, and you hold the queen, put it on. *For, at the worst, you bring down two honours for one.*

14. If a king be led, and you hold ace, knave, and small ones, play the ace. *For it cannot do the adversaries a greater injury.*

THIRD HAND.

1. Having ace and king, play the ace and return the king. *Because you should not keep the command of your partner's strong suit.*

2. Having ace and queen, play the ace, and return the queen. *For although it may prove better in some cases to put on the queen, yet in general your partner is best supported by this method.*

3. Having ace and knave, play the ace and return the knave. *In order to strengthen your partner's hand.*

4. Having king and knave, play the king ; and if it win, return the knave. *For the reason in No. 3.*

5. Always play the best when your partner leads a small card. *As it best supports your partner.*

6. If you hold the ace and one small card only, and your partner leads the king, put on the ace and return the small one. *For otherwise, your ace will be an obstruction to his suit.*

7. If you hold the king and one small card only, and your partner leads the ace ; should the trumps be out, it is good to play the king. *For by putting on the king, there is no obstruction to the suit.*

FOURTH HAND.

1. If a king be led, and you hold ace, knave, and a small card, play the small one. *For supposing the queen to follow, you probably make both ace and knave.*

2. When the third hand is weak in his partner's lead, you may often return that suit to great advantage. *But this rule must not be applied to trumps, unless you are very strong indeed.*

CASES IN WHICH YOU SHOULD RETURN YOUR PARTNER'S LEAD IMMEDIATELY.

1. When you win with the ace, and can return an honour. *For that will greatly strengthen his hand.*

2. When he leads a trump. *In which case re-*

turn the best remaining in your hand (unless you hold four originally): except the lead is through an honour.

3. When your partner has trumped out. *For then it is evident he wants to make his great suit.*

4. When you have no good card in any other suit. *For you then entirely depend upon your partner.*

CASES IN WHICH YOU SHOULD NOT RETURN YOUR PARTNER'S LEAD IMMEDIATELY.

1. If you win with the king, queen, or knave, and have only small cards left. *For the return of a small card will more distress than strengthen your partner.*

2. If you hold a good sequence. *For then you may show a strong suit, and not injure his hand.*

3. If you have a strong suit. *Because leading from a strong suit directs your partner, and cannot injure him.*

4. If you have a good hand. *For in this case you ought to consult your own hand.*

5. If you hold five trumps. *For then you are warranted to play trumps, if you think it right.*

OF LEADING TRUMPS.

1. Lead trumps from a strong hand, but never from a weak one. *By which means you will secure your good cards from being trumped.*

2. Trump not out with a bad hand, although you hold five small trumps. *For since your cards are bad, it is only trumping for the adversaries' good ones.*

3. Having ace, king, knave, and three small trumps, play ace and king. *For the probability of the queen's falling is in your favour.*

4. Having ace, king, knave, and one or two

small trumps, play the king, and wait the return from your partner to put on the knave. *In order to win the queen, but if you particularly wish the trumps out, play two rounds, and then your strong suit.*

5. Having ace, king, and two or three small trumps, lead a small one. *This is to let your partner win the first trick; but if you have good reason for getting out the trumps, play three rounds, or play ace and king, and then proceed with your strong suit.*

6. If your adversaries are eight, and you do not hold an honour, throw off your best trump. *For should your partner not have two honours, you have lost the game; and if he hold two honours, it is most advantageous to lead a trump.*

7. Having ace, queen, knave, and small trumps, play the knave. *For by this means the king only can make against you.*

8. Having ace, queen, ten, and one or two small trumps, lead a small one. *For it will give your partner a chance to win the trick, and keep the command in your own hand.*

9. Having king, queen, ten, and small trumps, lead the king. *For should the king be lost, upon the return of trumps you may finesse the ten.*

10. Having king, knave, ten, and small ones, lead the knave. *Because it will prevent the adversaries from making a small trump.*

11. Having queen, knave, nine, and small trumps, lead the queen. *For if your partner hold the ace, you have a good chance of making the whole suit.*

12. Having queen, knave, and two or three small trumps, lead the queen. *For the reason in No. 11.*

13. Having knave, ten, eight, and small trumps,

lead the knave. *For on the return of trumps you probably may finesse the eight to advantage.*

14. Having knave, ten, and three small trumps, lead the knave. *Because it will most distress your adversaries, unless two honours are held on your right hand: the odds against which are about 3 to 1.*

15. Having only small trumps, play the highest. *By which you will support your partner all you can.*

16. Having a sequence, begin with the highest. *By this means your partner is best instructed how to play his hand, and cannot possibly be injured.*

17. If any honour be turned up on your left, and the game much against you, lead a trump the first opportunity. *For your game being desperately bad, this method is the most likely to retrieve it.*

18. In all other cases it is dangerous leading through an honour, unless you are strong in trumps, or have a good hand. *Because all the advantage of trumping through an honour lies in your partner's finessing.*

19. Supposing it is hereafter proper to lead trumps, when an honour is turned up on your left, you holding only one honour with a small trump, play the honour, and next the small one. *Because it will greatly strengthen your partner's hand, and cannot hurt your own.*

20. If an honour be turned up on the left, and you hold a sequence, lead the highest of it. *Because it will prevent the last hand from injuring your partner.*

21. If a queen be turned up on the left, and you hold ace, king, and a small one, lead the small trump. *Because you will have a chance of getting the queen.*

22. If a queen be turned up on the left, and you hold a knave, with a small one, lead the knave.

For the knave cannot be of service, as the queen is on your left.

23. If an honour be turned up by your partner, and you be strong in trumps, lead a small one; but if weak in them, lead the best you have.—*By this play the weakest hand will support the strongest.*

24. If an ace be turned up on the right, you holding king, queen, and knave, lead the knave. *A secure lead.*

25. If an ace be turned up on the right, and you hold king, queen, and ten, lead the king; and upon the return of trumps, play the ten. *For by this means you show a great strength to your partner, and will probably make two tricks in them.*

26. If a king be turned up on the right, and you hold queen, knave, and nine, lead the knave; and upon the return of trumps, play the nine. *Because it may prevent the ten from making.*

27. If a king be turned up on your right, and you hold knave, ten, and nine, lead the nine; and upon the return of trumps play the ten. *Because this method will best disclose your strength in trumps.*

28. If a queen be turned up on the right, and you hold ace, king, and knave, lead the king; and upon the return of trumps play the knave. *Because you are then certain to make the knave.*

29. If a queen be turned up on the right, and you hold ace, king, and small ones, lead the king; and upon the return of trumps you may finesse, unless the queen falls. *For otherwise the queen will make a trick.*

30. If a knave be turned up on the right, and you hold king, queen, and ten, lead the queen; and upon the return of trumps, play the ten. *For by this means you will make the ten.*

31. If a knave be turned up on the right, and you hold king, queen, and small ones, lead the king; and should that come home, play a small one. *For it is possible your partner holds the ace.*

32. If a knave be turned up on the right, and you hold king and ten, or queen and ten, with two small cards, lead a small one; and upon the return of trumps play the ten. *For it is 5 to 4 that your partner holds one honour.*

WHEN YOU TURN UP AN HONOUR.

1. If you turn up an ace, and hold only one small trump with it, should either adversary lead the king, put on the ace. *For it cannot do greater injury.*

2. But if you turn up an ace, and hold two or three small trumps with it, and either adversary should lead the king, put on a small one. *For if you play the ace, you give up the command in trumps.*

3. If you turn up a king, and hold only one small trump with it, and your right-hand adversary should lead a trump, play the king. *This case is somewhat doubtful, and very good players think differently.*

4. If you turn up a king, and hold two or three small trumps with it, should your right-hand adversary lead a trump, play a small one. *It being the best way of securing your king.*

5. If you turn up a queen or knave, and hold besides only small trumps, should your right-hand adversary lead a trump, play a small one. *It being the securest play.*

6. If you hold a sequence to the honour turned up, play the honour last. *By this means your partner will be the best acquainted with your strength in trumps.*

OF PLAYING FOR THE ODD TRICK.

1. Be cautious of trumping out, notwithstanding you have a good hand. *For since you want the odd trick only, it would be absurd to play a great game.*
 2. Never trump out, should your partner appear likely to trump a suit. *For it is evidently best to let your partner make his trumps.*
 3. Should you be moderately strong in trumps, force your partner. *For by this you probably gain a trick.*
 4. Make your tricks early, and be cautious of finessing. *That you may not be greatly injured, though you fail of making the odd trick.*
 5. If you hold a single card of any suit, and only two or three small trumps, lead the single card. *For it will give you a chance of making a small trump.*
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GENERAL RULES.

1. Be very cautious how you change suits, and let no artifice of the adversary induce you to it.
2. Keep, if possible, a commanding card to bring in your strong suit when the trumps are out.
3. Never keep back your partner's suit in trumps, but return them the first opportunity.
4. If you hold a strong suit, and but few trumps, rather force your adversaries than lead trumps, unless you are strong in the other suits likewise.
5. Make the odd trick when in your power.
6. Always consider the scores, and play accordingly.
7. In a backward game, you may often risk one

trick in order to win two ; but in a forward game you are to be more cautious, unless you have a good probability of getting up.

8. In returning your partner's lead, play the best you have, when you hold but three originally.

9. Remember what cards drop from each hand, how many of each suit are out, and what is the best remaining card in each.

10. Lead not originally from a suit of which you have ace and queen, ace and knave, or king and knave, if you hold another moderate suit.

11. If neither of your adversaries will lead from the above suits, do it yourself with a small card.

12. You are strong in trumps with five small ones, or three small ones and one honour.

13. Do not trump a card when you are strong in trumps, and more especially if you hold a strong suit.

14. If you hold only a few small trumps, make them when you can.

15. If your partner refuse to trump a suit of which he knows you have not the best, lead him your best trump the first opportunity.

16. Should your partner have trumped a suit, and refused to play trumps, lead him that suit again.

17. Never force your partner but when you are strong in trumps, unless you have a renounce yourself, or want only the odd trick.

18. Should the adversaries trump out, and your partner have a renounce, give him that suit when you get the lead, if you think he has a small trump left.

19. Lead not from an ace suit originally, if you hold four in number of another suit.

20. When trumps are either returned by your partner, or led by the adversaries, finesse them ;

keeping the command all you can in your own hand.

21. If you lead and make the king of any suit, do not always conclude that your partner holds the ace.

22. It is sometimes proper to lead a thirteenth card, in order to force the adversary, and make your partner last player.

23. If weak in trumps, make your tricks soon ; but when strong, you may play a more backward game.

24. Keep a small card of your partner's first lead, if possible, in order to return it when trumps are out.

25. Never force your adversary with your best card of a suit, unless you have the second best also.

26. In your partner's lead, endeavour to keep the command in his hand, rather than in your own.

27. If you have a saw, it is generally better to pursue it than to trump out, although you should be strong in trumps with a good suit.

28. Keep the trump you turn up as long as you can.

29. When you hold all the remaining trumps, play one of them to inform your partner ; and then put the lead into his hand.

30. It is better to lead from ace and nine, than from ace and ten.

31. It is better to lead trumps through an ace or king, than through a queen or knave.

32. If you have the last trump, some winning cards, and one losing card only, lead the losing card.

33. When only your partner has trumps remaining, and leads a suit of which you hold none,

if you have a good sequence of four throw away the highest.

34. If you have an ace with one small card of any suit, and several winning cards in other suits, rather throw away some winning card than that small one.

35. If you hold only one honour with a small trump, and wish the trumps out, lead the honour.

36. If trumps have been led thrice, and two remain in the adversaries' hands, force them out.

37. Never play second-hand the best of your adversaries' lead, unless your partner has none of it.

38. If you have four trumps, and the command of a suit of which your partner has none, lead a small card, in order that he may trump it.

39. If you hold five trumps with a good hand, play trumps, and clear your adversaries' hands.

40. If you hold the ace and three small trumps when the adversaries lead them, and have no particular reason for stopping the suit, let them quietly make king and queen, and on the third round play the ace.

41. When leader with three small trumps, one strong suit, one moderate suit, and a single card, begin with the strong suit, and next lead the single card.

42. Be careful how you sort the cards, lest a sharp eye should discover the number of your trumps.

WHIST is sometimes played by three persons, one of them undertaking an ideal partner called dumbmy, whose cards are turned up to view on the table, which is reckoned rather an advantage to a good player, but apt to confuse an indifferent one. Now and then only two people play, with each a dumbmy.

Three-handed whist, a game requiring but little skill, is played by discarding all the deuces, three, and fours, with one five ; each person acting alone : in this way every trick above four, and each honour, is reckoned ; in other respects, these modes do not vary from the usual methods and rules.

ADDITIONS.

A MODERN writer upon the science of Whist having published some doctrines contradictory to those formerly laid down by Messrs. Hoyle and Payne, though the greater part of his other directions are copied from them almost word for word, the Editor of Hoyle's Games Improved, states the substance of such of the said writer's rules and maxims as appear to be either new, serviceable, more explicit, or in opposition to those heretofore mentioned in this volume, to which references are given in the body of these additions ; hoping the readers thereof will constantly bear in mind, that material changes in the cards, or state of the game, often demand a deviation from general maxims, and also that various situations, partners, or antagonists, frequently require different methods of play, to all of which an adept can readily accommodate himself ; and again, that even acknowledged proficients occasionally disagree upon certain doubtful points, of which an example occurs at page 154, maxim 3 ; and for others, compare Hoyle at page 93, rule 2, with Payne's second maxim upon leading trumps at page 150 ; also Hoyle's fourth game in page 106, with the maxims 17, 18, page 152, together with several more in other places, which an attentive perusal will enable the student to discover. The

Editor states, but does not pretend, otherwise than as above, to explain the reasons of such variations, for

“ *Who shall decide when doctors disagree?* ”

Do not perplex yourself with many calculations at first, but after obtaining a little theoretical knowledge, prefer contending with good players rather than novices. Particularly shun those who direct or find fault during the game, and accustom yourself never to lead a card without having some view, even if an erroneous one, for so doing ; do not always judge from the result, as indifferent play sometimes succeeds where good play would fail ; finally, when an adept plays in a way you do not understand, get him, if possible, to favour you with his reasons, and try them yourself upon the cards.

After sorting the cards, look at the trump, consider the state of the game with the strength of your hand, and fix your plan accordingly ; then attend strictly to the table, except when it is your turn to play, considering carefully the different modes pursued by each person, a competent knowledge of which may direct you in playing your own game : when possessed of three or four small trumps only, rather lead from a single card than a long weak suit ; [see page 92, rule 19] ; and from a weak suit rather than one in which you possess the tenace ; but be cautious of deceiving your friend, especially in his own or your leads, and demonstrate your hand to him as clearly and as early as you can : observe attentively what cards are played [see page 156, rule 9], and what is discarded by any good player, and whether the

lead at the time be from the friend or foe ; if from the first, the discard is intended to direct the partner, otherwise it is to mislead the opponent : when proficients throw away the best of a suit to a partner's winning card, it is intimating that they command the same [*see pages 103 and 123, rules 2 and 6*] ; and should the second-best be thrown away, that is saying they do not possess any more ; if a low card be led before the next inferior one, that implies a weak suit, and the contrary when the lowest is played first ; endeavour likewise to keep the command of your enemies' suits, but never those of your friend. [*See pages 103, 104, rules 1, 2, 3 ; and page 148, maxim 1.*]

Leading from single cards, without a strength of trumps, is hazardous, but often advantageous ; hazardous, for when a friend possesses the king guarded, he will lose it should the ace lie behind him, or should he win he may play trump, as believing the single card to be from a strong suit, or the enemies may do so, as guessing at your views ; on the other hand, advantageous, as by so leading you may both preserve tenace in other suits, and perhaps make some small trumps. [*See pages 92 and 156, rules 19 and 14.*] Possessing tierce to a king, with others of the same suit, lead the knave ; holding ace-king, or king-queen, with either five or four more, play the highest, except in trumps, and then with four or less, lead the lowest ; do the same in other suits when all the remaining trumps are with you and friend. Having an ace, or king of trumps, with sequence from ten downwards, and queen or knave turned up on the left, lead the ten ; having ace, queen, knave, or ace, queen, ten and more, lead the ace. [*See page 151, maxims 7 and 8.*] With ace, queen, and ten, when the knave is turned up on the right, lead the queen ;

ace, knave, and small cards, lead the lowest, if trumps ; but in other suits, except powerful in trumps, play the ace when with more than two ; ace and four small ones in trumps, lead the lowest. [See page 147, maxim 13.] When with ace and one, lead ace, if your friend's suit, else the small card ; king, queen, ten, &c., play the king ; but should it pass, do not follow the lead, for the ace may be kept up by an enemy [see pages 147 and 151, maxims 15 and 9 ; and page 157, rule 21]—king, knave, and small ones, lead the lowest ; but if with only one small card, do not venture except it is your partner's suit, then play king and knaves ; queen, knave, and one, lead queen ; but when with two, or more, the lowest [see page 97, rules] 24 and 32 ; pages 147 and 151, maxims 16, 11 and 12 ;—queen, ten, and two, or queen and three small ones, play the lowest ; queen or knave, with only two, the highest. It is equal whether you lead up to or through an ace, not quite so to a king, but disadvantageous when to the queen turned up. [See pages 105 and 106, games 1 to 4 ; pages 152 and 153, maxims 17, &c.] After leading two rounds of trumps, should you remain even with three, but the best in an adversary's hand, lead a small one, to avoid stopping your partner's suit, as well as to gain the tenace. Some proficients often play a king second hand, others but seldom, but none in that situation should put on either queen, knave, or ten.

Should you hold a good hand at the beginning of a game, or when the opponents are greatly advanced, play boldly, otherwise cautiously ; be particular both in what you play, as in what you throw away ; it is often of bad consequence to play the superior card of two, and remember that finesse are usually proper in trumps ; and if strong

in trumps, finesses may then be ventured in other suits.

Always trump uncertain leads [*see page 95, rules 10 and 12*], and also 13th cards second hand where weak, but never if strong in trumps, except to stop a see-saw ; and, unless when your left-hand adversary appears powerful in trumps, or your friend evidently intends to force you, although you hold an honour, or even a ten, and three other trumps, do not hastily overtrump an opponent, especially if you possess a strong suit that might be brought in by the long trump, or that trump may hinder an enemy from bringing in his suit. Reversing this last rule, will instruct you when to force the antagonist.

Generally force the strong, sometimes the weak, but never both adversaries ; and if your friend refuse to trump an opponent's certain winning card, play trumps, as soon as you can obtain the lead ; likewise, should you hold a powerful suit, show it, previous to leading trump, unless you possess great strength in trumps ; also with ace and three more trumps, it is often wrong to win the first or second lead in the same, unless your partner trumps a suit, though, when circumstances demand two certain leads in trumps, play the ace ; otherwise, except either you have or believe your friend has a strong suit, do not trump out with less than six [*see page 158, rule 39*] ; or when, though weak in them, you are strong in other suits, or if the opponents play from weak suits, or for the reason stated in maxim 6, at page 151.

Do not force your partner, except you are strong in trumps [*see page 118, case 7 ; and page 156, maxim 17*]—or when he has led from a single card, or shows a weak game ; or when you are likely either to save or gain an odd trick, or par-

ticular point ; or when great strength of trumps appears against you ; or, if there be a probability of a see-saw ; or when your friend has been forced, and did not lead a trump—[see page 118, case 8 ; and page 156, maxim 16]—or possessing the commanding card, with small ones of your enemy's suit, of which your friend is entirely without, then force him with the low cards, and keep the commanding one till the last.

When strong in trumps, if you hold ace, king, and two more of the right-hand adversary's lead, either pass it the first time, or win with the ace, and force your partner by going on with the suit ; should you be weak in trumps, gain the trick with the ace, but do not continue the suit ; also, in case the right-hand opponent returns his friend's lead immediately, if possessed of the remaining best card and a small one of that suit, you should play the small one, but when weak in trumps do not hazard this in other suits ; likewise, if powerful in trumps, inform your friend as early as you can, [see page 117, case 1], and when last player, having a sequence, you should take a small trump with the highest, and directly lead the lowest—[see page 124, rule 10] ; also when strong, except in case of a see-saw, you should not trump the second best of a suit led by your friend, but throw away a losing card.

When an enemy holds three or four trumps, and you retain the best only, do not lead that, because it may be more advantageously employed to stop the other opponent's strong suit ; but when both your antagonists possess trumps, and your friend is without any, then take out two for one.

Should a good player throw away a small card, and refuse to trump, the opponent may conclude

that he is powerful in trumps, with another strong and one weaker suit; and if an honour be thrown away, then it is probable he holds only two suits, one of them trumps; in such a situation the opponent should force him, and avoid leading trumps, but give his own friend a chance to make tricks.

Upon winning your friend's lead with a queen, do not return the same, except the suit be trumps, as certainly the ace or king must be with your right-hand antagonist; and though it is usually proper to return a partner's lead of trumps, be cautious of doing so, after he has played a nine, ten, or other doubtful card; but when your friend has led trumps of his own accord, should you hold ace, king, and two others, play three rounds; but if, because you have shown strength in them, he lead an equivocal card, pass it the first time.

Good players seldom lead either nine or ten, except from a sequence up to the king, or from nine, ten, knave and king, or when best of a weak suit, not exceeding three in number: whenever your partner so leads originally, and you hold an honour with only one more, put on the honour, but do not act so when with two or more, except with ace and small cards, then always take it.

Should your friend lead ace, and then queen, of a suit in which you have king and two more, take the queen to avoid stopping the suit: likewise always play to his lead the lowest of a sequence, in order to inform him, and win your enemies' lead with the highest, to deceive them: for the same reasons keep the card turned up as long as possible when the friend leads a trump, but act differently when an opponent is the leader. [See page 115, rule 3; and page 157, maxim 28.] When your partner leads a 13th card [see page 157, rule

22], while most of the trumps are in hand, it is usually a hint for you to play a good trump upon it, and with only three of his lead in any suit return the highest, with four, the lowest [*see page 156, rule 8*] ; when you hold an indifferent hand, always sacrifice it to your partner.

Should the right-hand opponent call, and your friend lead through him, you, possessing ace or king, with a nine and small trumps, may finesse the nine. [*See page 126, rule 19.*]

When any one of the party calls before his time, it is often a hint to the friend to lead his best trump [*see page 124, case 11*] ; and that friend should show whether he be powerful or weak in them, that in the first instance the player may preserve his own strong suit entire, or throw away from it, and keep guard on those of the adversaries in the latter situation. Every player should also at other times, with reference to his own hand, keep guard on the enemies' suits, when he is weak in trumps, or throw away from them when strong, and always discard from the friend's powerful suit.

If you hold ace, knave, and a small trump, finesse the knave to your partner's lead ; also, when strong in trumps, act similarly in any suit, and unless a trick will save or gain a particular point, constantly pass your friend's ten in every suit where you possess ace, knave, and another.

When twelve cards of the same suit remain, and your friend leads after ten rounds have been played, should you possess king, ten, and another, and have acquired six tricks, you can win the odd one, however the cards may lie ; should your right-hand opponent put on queen or knave, play the king ; if a smaller, the ten ; but when you have

only five tricks, play the king. [See page 127, rule 22.]

Many persons holding tierce-major lead king, and afterwards queen ; this method is often the cause of harm, when king and queen happen to have been so played, and the ace kept back by an enemy.

When the last player wins an opponent's lead, it is better to return it than begin from a weak suit [see page 95, rule 10 ; and page 149, maxim 1] ; and also a last player, having ace, knave and another, should not take a king led, as the adversary must then either change the suit, or give him tenace therein.

When, being second player, you hold ace, queen, and more, in any suit led, play a small one [see page 147, maxim 2] ; except your antagonist should lead knave or king, then always put on the ace, but pass the knave when ace is your only honour ;—with ace, knave, ten, and another in trumps, play the ten, in other suits the small card ;—holding ace or king, with ten and another, do not take the queen, but win it when possessing any lower card instead of the ten [see page 148, maxim 12] ; with ace, queen, and ten, put on the ten ;—having only three of the suit, play, when able, an honour on an honour (except ace on knave, as above directed), but not when possessed of four or more ; with king, and one other only, sometimes play the king, but generally if trumps, and always when turned up—queen or knave should not be played unless a superior honour has been turned up on the right ;—with king, queen, &c. put on either ;—queen with knave, and one other, the knave [see page 148, maxim 8] ;—should the right-hand adversary return the knave after winning his partner's

lead with either king or ace, avoid putting on the queen :—with only small ones, the lowest.

Play the close game for the odd trick, force the friend, and be very cautious of leading trumps, or finessing—[see page 155, maxims 1 to 5]—also play the obscure game whenever it appears that the winning cards lie between you and the adversaries, and a clear one when your friend possesses a good hand.

When at eight, and holding two honours, consider the enemies' score, previous to calling, whether by your not doing so they are likely to save their lurch or win the game: when the antagonists do not call at eight, should you be four or nine, it is clear that you and your friend hold at least two honours; should both sides be eight, and no one call, each player must possess an honour.

Generally trump when it is apparent that your partner, if an adept, wishes you to do so, but consult your own hand when he is an indifferent player.

When the left-hand opponent refuses to trump your winning card, should you hold the commanding card of the suit he throws away, lead the same directly.

After the trumps are all out, whoever possesses the commanding card of the opponent's suit, may play as if retaining the 13th trump.

Should the right-hand adversary lead a card on which his partner plays the knave or queen, and your friend gains with the king; should that adversary again lead a low card of the said suit, play the ten if you have it.

When the left-hand opponent leads a king, apparently in hopes of afterwards finessing the knave, and you happen to retain queen and ano-

ther, lead the small one through him, the first opportunity.

When being third player, you hold the best and third of a suit led, on which the second player has played the fourth, be fearful of finessing the third, as it is about three to two, and sometimes two to one, but that the last player holds the second-best. [See pages 121, 122, case 2.]

When your partner renouncing to a lead, thereby declares his strong suit, should you hold a single card of the same, lead it as soon as possible.

Should the last player hold a tierce-major and small card in trumps, tierce-major and two others in a second suit, king and a low card of a third, with queen or knave and small one of the fourth, in which the opponent has led the ace, the last player should throw away queen or knave in expectation of thereby obtaining a change in the lead.

When your partner, if a good player, changes from the first suit, keep the commanding card or tenace of the fresh suit, and do not return it as in case of an original lead.

Proficients often practise an underplay, *viz.* after gaining the trick, and holding the best card of the suit, they return the lowest of the left-hand adversary's lead, in hopes their partner may make the third, and they themselves afterwards take the second-best; or, possessing the first, third, and fourth cards of a suit, of which their left-hand antagonist has the second best guarded, by leading the fourth it is often passed, and thereby every trick gained. This method is always proper when strong in trumps; but if weak, make the sure tricks as soon as possible.

Examples of Tenace.—When one player holds ace, queen and a small card, and the antagonist, king, knave, and another of the same suit, the first-

mentioned, by leading the small card, gains the tenace and two tricks; but by playing ace first, he would get only one; while the antagonist, let him lead what he will, could only obtain a trick. *Suppose also*, 1st, after nine rounds, and as many trumps out, the person whose turn it is to play holds the second and fourth trump, with ace and a small card of any suit not led, and his left-hand opponent possesses the first and third trump, with king and another of the suit of which the person to play holds the ace; should he lead the ace, the opponent ought to throw away the king, trusting that his partner may win the next trick, and then leading through the first player, prevent him from making either of his trumps.—2d. After ten rounds, should any one retain king, queen, and ten of a suit not led out, his left-hand adversary ace, knave and a small card, and the first-mentioned lead his king; if the other pass it, he will gain tenace and two tricks, but only one if he take the king.—3d. A third player possessing ace, knave, and ten of his partner's lead, by finessing knave or ten, may obtain two tricks, especially when a forced lead; but unless his partner held an honour in that suit, no more than one trick could be gained by playing the ace. [See page 120, case 19.] Tenace is easily maintained against the right-hand, but with great difficulty against the left-hand antagonist.

A critical Point.—Suppose the parties, each at nine and ten tricks played out: A to have gained six of them, and to possess knave and a small trump, with two diamonds and the lead; B the antagonist on the left, the queen and ten of trumps, with two clubs: C the friend, two low trumps and two diamonds; and D the right-hand enemy, ace and a small trump, a club and a heart; A leads the best diamond, which, passed by B and C, must

be won by D, who trumping with the ace, and next leading the small one, puts the tenace into B's hands and thereby obtains the game.

Keep, if possible, the advantage of the tenace situation, when the winning cards are with you and the right-hand antagonist, and give the same to your friend where the strength of any suit is between him and your enemy on the left, recollecting, that when the last-mentioned, or you lead, the tenace is against the said adversary, but for him, if your partner lead; who being supposed to hold the first, third, and another of any suit, when your left-hand opponent possesses the second or fourth card, with a small one of the same, and the lead, and plays the small one, you, as last player, should take it, even though already won by your partner, and afterwards by leading through the foe, prevent him from gaining a trick.

Suppose a person, after nine rounds, to retain the two lowest trumps, with two forcing cards and the lead, the two best trumps being in one or both of the enemies' hands, if the player to lead and his friend are at seven, and have won six tricks, he should then lead a trump, because if the trumps should lie one in each opponent's hand, he would thereby obtain the game; but if the adversary be at nine, then this mode should not be risked, for should the superior trumps lie both in one hand, the odd trick would be hazarded.

The 13th trump is of great consequence; a player holding it, with ace and four small cards of any suit not led, and of which the enemy plays king and queen, may by passing both these gain three tricks in the suit, whereas by taking the king he would only gain one.

SHORT WHIST.

THIS game has lately come so much into fashion, that it cannot but find a place here, though little need be said of it. It differs from the common Whist,

1. In *half the number of points*, five, instead of ten, constituting the game ; and hence the appellation given to it of *short*.

2. As to *honours*, which are never called, though always counted, except at the point of four, which answers to the point of nine in the other game, and tricks in like manner have at this precedence of honours.

3. As to *the stakes*, respecting which eight points may be gained ; as a game here may not merely be a single or a double, but a treble one. It is a single game, if the losing partners do not mark three points ; double, if they mark but one or two points, as may be agreed upon ; and treble, if they do not mark a point ; and two points are allowed for the rubber.

The laws and penalties as to both games are the same.

Five, instead of ten, constituting the game at Short Whist, brings it much more within the sphere of chance than Long Whist, for by presenting a more extended field to the operation of your cards, it neutralizes the good skill of a fine player, reducing his advantage over an inferior adversary in the ratio of one half.

The odds are likewise considerably altered. It is full 5 to 6 in favour of the dealer for the game, and 6 to 5 for the rubber ; while in the old game it is only 21 to 20, an advantage in the long run that will triumph over the most consummate skill.

Although there exists no very great difference between the two games, the *essential* point is to seize this difference, and to make a skilful application of the general rules of the old game, modified as circumstances may require—a quality which stamps the good player. The advantage, however, which in the old game eight has over nine, does not exist at Short Whist at the corresponding points of four and three, for as at the latter the honours are never called, three is no better than two, as unless you make the odd trick you lose the game. It follows, therefore, that the most approved tactique is a bold, dashing, *en avant* system, almost the very reverse of the Fabian policy of the old one, which presents so wide a field for stratagem and manœuvre. Short Whist is very fast encroaching on the popularity of its parent; and the reason is obvious—it affords the excitation of higher play in the ratio of 2 to 1.

In order to reduce the operation of chance, which at this game so narrows the exercise of skill, it has long been the practice at some clubs to halve the honours—that is, to make four count for two, and three for one.

There is one very curious fact connected with Whist, and which has been passed over in silence by every writer upon this beautiful game. It is this, that after a mis-deal, on dealing with the same pack, one of the players will hold at most but one of a particular suit. To account for the fact itself, or to measure even its variations, *viz.* the particular suit or the hand in which the phenomenon may occur, bids defiance to all human ingenuity, but it is a fact that occurs nine times in ten, and which without any further observation, will suggest to the reader the policy of calling for a new pack of cards every time a misdeal occurs.

ECARTÉ.

LIKE Piquet, the game of Ecarté is played with thirty-two cards; the king is the highest card; the ace ranks after the knave, and the remaining cards have the same relative value as at Whist.

EXPLANATION OF THE TERMS.

ECARTER; *to Descard*. The throwing out of one or more useless cards for the purpose of replacing them by others from the talon or pack.

ELDER HAND. Is the person who wins the first trick previous to when it is the party opposed to the dealer.

FORCING. Is playing a suit which the adversary cannot follow.

POINT. Is three tricks out of the five; five points are the game.

PROPOSITION. Is an offer of discarding.

QUART. A sequence of four cards.

QUART-MAJOR. A sequence in which the king is included.

QUINT. A sequence of five cards.

QUINT-MAJOR. A sequence in which the king is included.

REVOKE. Is not being able to follow suit.

SCORE. Is the state of the game.

SEQUENCE. The regular succession of any number of cards in hand.

SINGLE. Is when one party wins the game after the adversary has won three.

DOUBLE. When one party wins before his opponent scores three.

TREBLE. When one party wins the game before the other has scored one point.

TIERCE. A sequence of three cards.

TIERCE-MAJOR. A sequence in which the king is included.

UNDERPLAYING. Is following suit with a card of inferior value, when you have a commanding one in hand.

VOLE. Is when a party wins every trick.

LAWS OF THE GAME.

Ecarté ought to be played with two packs distinguished by backs of different colours.

At the commencement, the dealer may select the colour he pleases, but having done so, he must play with them during the game.

The deal is determined by cutting the highest card. The cards must be shuffled by the dealer, and cut by his adversary ; but the latter has the privilege to shuffle them before cutting, and the dealer, on his side, to shuffle them again before they are cut.

The game consists of five points.

The player who makes the *point* scores one, and for the vole two.

The king always counts for one, whether it be turned up or dealt ; but if held in the hand, it must be announced before the player plays, or he loses the right to mark it ; and if either party announces the king when he has it not, the adversary marks one for the mistake.

OF DEALING.

Five cards are dealt either by three and two, or *vice versa*, to each player ; but whichever mode be adopted at the commencement, it must be observed throughout the game. If departed from, the

adversary before looking at his cards may insist upon a new deal.

A card faced during the deal, renders it void, unless it happen to be the eleventh, or trump card, which is to be turned up.

If the dealer faces one of his adversary's cards, the deal is void, or not at his option ; but if the card belongs to the dealer, it is not void. Should the dealer distribute too many cards to his adversary, he may either throw out the superfluous cards, or call for a new deal. If the dealer gives less than the right number, the adversary may complete them from the talon, without altering the trump card, or call for a new deal.

If, on the other hand, the dealer has too many cards, his adversary may either demand a new deal or draw the superfluous cards. Again, if he has a less number than he ought to have, the adversary may demand a new deal, or permit the number wanting to be taken from the *talon*. If two or more cards be turned up by the dealer, the adversary may ascertain, if possible, which should have been the trump card, and it must be considered so if discovered ; or he has the privilege of putting aside all the cards which may have been seen, and to have a fresh one turned up ; or he may demand a new deal, provided he hath not seen his cards.

If either party have more or less cards than he ought to have, and discards for the purpose of exchanging, without acquainting his adversary of the circumstances, *he loses two points*, and likewise the right of marking the king, whether it be turned up or in hand. If either player deal out of his turn, and it be discovered before the trump card is turned, a new deal may be called for ; but should the turn-up card be faced, the cards ought

to be put aside for the next deal. If the wrong deal be not discovered before discarding or playing, it stands good.

If either party plays out of his turn, he must take up his card, unless his adversary had played to it, in which case it is a good trick. Either party looking at his adversary's tricks, may be compelled to show his own. A player throwing down his cards forfeits two, if has not won a trick ; and if has won a trick, he loses one. A player is considered to have thrown down his cards if he lowers them so as to lead his adversary to think that he has given up the game, and under that impression has induced him also to show his hand. A player quitting his seat without his adversary's permission, and of any person backing his play, must be considered to have given up the game ; but in that case, a better may take up the cards, and finish the game.

A player revoking or underplaying, cannot score the point if he win it ; and likewise, if he make the vole, he can only score one, or he may be compelled to play the hand over again.

OF DISCARDING.

If the first player be dissatisfied with his hand, he may propose, but it is at the option of the dealer to accede or not to his proposal.

If the dealer accedes to the proposal, he gives his adversary, from the talon, cards corresponding to the number he may have thrown out, and then in like manner discards from his own hand as he pleases.

Should the dealer not accede to the proposal to discard, or that his adversary plays without proposing, the opposite party if he make the point is entitled to score two.

If either party propose or refuse to discard, he cannot retract, neither can any alteration be made in the number of cards proposed.

Previous to receiving fresh cards from the talon, each party must put aside the discarded ones, which cannot be again taken in hand, even if they be trumps; and any player looking at his discarded cards, may be compelled to play with his hand upon the table.

If the dealer, after discarding, face a card, his adversary may again discard or demand the card so seen.

Should the dealer give more or less cards than are demanded, he loses the point, and the right to count the king if in hand, but not if it were the trump card originally turned up.

Should the dealer take more cards than he has discarded, he loses the point, and the right to count the king in hand; but if he takes less, he may make it up from the talon, and if the error be not discovered until he has played, his adversary is entitled to count the tricks which he cannot play to.

If the elder hand demand more cards than he has discarded, he loses the point and likewise the right to count the king; but should he ask for a less number he does not lose the right to mark the king.

Should the cards be faced after discarding, fresh cards may be called for, but not a new deal.

If after discarding, a second proposal for discarding is made by the elder hand, the refusal of the dealer to comply does not subject him to forfeit two, should he lose the point.

If the elder hand, with the permission of the dealer, discard several times, he may take from the talon as required; and if by that means the stock

be exhausted, so that there remain none for the dealer to exchange, he must keep the cards he has dealt; and if he should have discarded before discovering his mistake, he must draw the number of cards wanting to complete his hand from those thrown out by his adversary.

Either party, after discarding, playing with more than five cards, loses the point and the right of counting the king.

DIRECTIONS FOR PLAYING.

When you have three tricks in hand always discard, unless, indeed, your adversary is four; then, to discard is imprudent, as you afford him a chance of taking in the king. Again, it is sometimes imprudent to discard when you wish to throw out less than a majority of your cards, as the chances of taking in two good cards are against you, and you further cannot tell how many your adversary may discard. Thus, the elder hand having the option of the discard and the lead, ought to consider well his hand before he proposes.

There are certain hands which are styled *jeux de règle*; in other words, games which cannot be lost, but by the chance of your adversary holding two trumps. With such a combination of cards, it is against all rule to discard.

1. If you hold one trump, a king, with a queen, and two cards of her suit, commence with the queen and her suit, and if the queen should be trumped, you have two cards for the *rentrée*, to regain the suit and continue the game.

2. If you hold one trump, with a king and three cards of his suit, begin with the trump if a good card.

3. If you hold one small trump, a tierce-major, and one small card of any other suit, commence with your strongest suit by playing the king ; and if trumped, regain with your own trump the lead, and play again from your strong suit.

4. If you hold two trumps, an ace, and knave of one suit, and a knave of another, commence with the guarded knave ; and if you make the trick, and that your trumps be good ones, follow up with them.

5. If you have two trumps and three cards of another suit, lead off with the best card of the other suit, holding the trumps in reserve.

6. If you have two trumps, an unguarded king, and two other cards, play a small card and regain the lead by a trump, return the lead with the other trump, and if it passes, play your king.

7. If you have two trumps, a queen, and another card of her suit, and a small card of a third suit ; supposing one of the trumps a good one, play your queen ; and if trumped, you may regain the lead with your small trump, play the other, and then continue the queen's suit. If both the trumps be small, commence with the single card, and if your opponent takes it and should return the suit, your small trumps will tell.

8. When you hold a king unguarded, and another king with a card of the same suit, a queen and another card of her suit, none of which are trumps, *play the guarded king*, and follow it up with the same, and should your adversary trump it, you may regain the lead with your other king or the queen.

9. With a sequence of three trumps, lead off the highest.

10. If you lead a trump, and find that your adversary cannot follow a suit, reserve your re-

maining trumps to regain the lead, and play any unguarded court card you may have.

11. If after making two tricks you hold the queen and two small trumps, play a small card rather than the queen, as your adversary may take her with the king.

12. If you have a bad hand, and only one trump, always lead a single card, the best you have, and reserve your trump for the chance of making a trick.

13. There is, however, one point when it is bad policy to declare the king should you hold it. Supposing that you mark *three*, and that your adversary does not allow you to discard, or that being himself the eldest hand, he should play without proposing; in either case, if he does not make the point, he loses two, which gives you the game, a result you will have a greater chance of obtaining by masking your hand; in other words, by not announcing that you hold the king.

From the above it will be deduced that more depends upon skilful combination, and a quick calculation of the chances at the several stages of the game, than upon *good cards*. But more fully to illustrate our position, we subjoin two games, which we recommend to the attention of the learner as good practice.

GAME 1.

<i>Dealer.</i>	<i>Eldest-hand.</i>
Ace, king, and nine of spades.	Queen of trumps. Queen of clubs.
Knave and nine of clubs.	Ace of hearts. Eight and seven of spades.

The elder hand commences with the eight of

spades, the dealer may take it with the nine, but should he do so he loses the game; but, on the contrary, if he play the king he will win it, because, by playing the king, his adversary is induced to think that he has no more of that suit.

The dealer will then play his knave of clubs, which the adversary takes with his queen, and returns his queen of trumps, and having with his eight of spades forced his opponent's king, is led to imagine his seven the best spade, and loses the point. On the other hand, if the dealer had taken his eight of spades with his nine, his opponent would have followed his queen of trumps with the ace of hearts instead of playing the seven of spades, and have made the point.

GAME 2.

<i>Dealer.</i>	<i>Elder-hand.</i>
Queen and nine of trumps.	Knave and ten of trumps.
Knave and ten of clubs.	King of diamonds.
Seven of hearts.	King and ten of hearts.

The elder hand having here the chance of the vole, he dashes off with the king of diamonds, and as the queen is the only card against him, he may finesse his knave of trumps; and, if the king of diamonds should be trumped, he may still play for the point. Should the dealer follow with the knave of clubs, the elder-hand will trump it with the ten, return the king of hearts, and make the point; but if, instead of so doing, he had played his knave of trumps, the dealer would have captured it with the queen, and made his ten of clubs. To the king of hearts the dealer will play the seven; the elder-hand plays the ten of hearts; the dealer

trumps it, returns his ten of clubs, which is trumped with the knave, and thus the elder-hand wins the point.

The foregoing illustrations will familiarize the learner with the fundamental principles and the finesse of the game, and a thorough knowledge of its chances will guide him as to the policy of discarding; above all, he must always well consider the state of the score, and remember that the policy of the dealer is not that of his adversary, neither is it the same at all points of the game. *Again, let him take care that his countenance be not the index of his hand; a novice, by his hurried manner of proposing, often betrays the weakness of his hand to his adversary, and thus defeats his own object.* Coolness and impassibility of countenance are two indispensable qualities at Ecarté.

OF BETTING.

Bystanders may bet on either of the players, and may give advice as to the way the hand should be played, &c. The player, however, is not obliged to follow the advice of those who may bet upon him. Again, should a better overlook the cards of the adverse player, the latter is entitled to his stake. A person betting may interfere if he observes that the adverse player has marked more than he was entitled to do, or in fact, revokes or violate in any other respect the rules of the game.

Should a player throw down his cards and retire from the table without consent, any person interested may take up his hand and finish the game.

The players have the right of covering all bets in preference to other persons.

On the termination of the game, the winner divides the stakes; of course taking due care, in the first place, of number one.

Should, on the division of the spoil, any deficiency be discovered—a contingency of no unfrequent occurrence where many are playing—the dealer is not responsible, but the betters are to submit to a reduction proportionate to their several stakes.

CALCULATION OF THE ODDS.

Against the dealer turning a king it is 7 to 1.

That the elder-hand or dealer does not take in, supposing they discard three cards, two trumps, are 4 to 1 against him.

One or more, 3 to 1 for him.

With one trump in hand, on discarding three, the chance of taking in two more trumps is $6\frac{1}{2}$ to 1 against him.

One or more is about 6 to 5 for him.

That either hand does not hold the king the first time, are $5\frac{1}{2}$ to 1.

N.B. When the dealer and the elder hand discard the same number of cards, their chance is the same, and varies only in ratio to the relative number of cards discarded by each.

PIQUET.

PIQUET is played by two persons, with thirty-two cards : the ace, king, queen, knave, ten, nine, eight, and seven of each suit. The ace is the superior card, and equal to eleven points ; the king ranks above the queen, and the queen above the knave, &c. The three court cards are each equal to ten points, the rest counting for as many points as they have pips.

The game consists of 101 points. The players begin with shuffling the cards ; they then cut ; he who cuts the lowest deals, but the great advantage is in being elder hand. The dealer then shuffles the cards again, and presents them to his adversary, who may also shuffle, but the dealer must have the last shuffle. If the adversary should scatter the cards, or cut but one off, or leave but one at the bottom, the dealer may mix and shuffle them again. The dealer is to give twelve a piece, by two at a time, and the eight cards which remain must be placed upon the table, and are called the talon or stock.

In this game there are three superior chances, *viz.* the repique, the pique, and the capot, all of which may be made in one deal, as thus : suppose one of the players to have four tierce-majors, his point to be good, and he is eldest hand : he begins by counting three for his point, then twelve for his four tierce-majors, next fourteen for the four

aces, fourteen for the four kings and fourteen for the four queens, then sixty for the repique, thirteen he gains in playing the cards ; and he has forty for the capot, which make together one hundred and seventy : this stroke, perhaps, has never happened, but it is just if it ever should.

To pique the adversary, you must be elder hand ; for if youngest, your adversary counts one for the first card he plays ; and then you having counted only twenty-nine in hand, even if you take the first trick, it will not authorize you to count sixty, but only thirty.

The carte-blanche precedes every thing, then follows the point, then the huitièmes, the septièmes, the sixièmes, the quints, the quarts, the tierces, the four aces, kings, queens, knaves, or tens ; then the three aces, kings, queens, knaves, or tens ; then the points gained in playing the cards ; and the last is the ten for winning the cards, or the forty for the capot. After sorting the cards, the first thing to be considered is, whether you have a *carte-blanche* ; if so, let your adversary discard, and when he is going to take in lay your twelve cards on the table, counting them one after another.

The players having examined their hands, the elder-hand may discard five cards or fewer as he may deem for his advantage, and, laying them aside, he takes as many from the *talon* or heap ; the youngest hand can lay out three only, unless any of the five allotted to his adversary be left, which he may take or not, as he pleases.

In discarding, the first intention in skilful players is, to gain the cards, and to have the point, which most commonly engages them to keep in that suit, of which they have the most

cards, or that which is their strongest ; for it is convenient to prefer, sometimes forty-one in one suit to forty-four in another, in which a quint is not made ; sometimes, even having a quint, it is more advantageous to hold the forty-one, where, if one card only be taken in, it may make it a quint-major, and gain the point, or the cards, which could not have been done by holding the forty-four, at least without an extraordinary take-in. Also endeavour, in laying out, to get a quatorze, that is, four aces, kings, queens, knaves, or tens, each of which counts for fourteen, and is therefore called a quatorze. The fourteen aces in your hand hinder the counting fourteen kings in the adversary's, &c., and by this superiority you may count a lesser quatorze, as of tens, notwithstanding your adversary may have fourteen kings, &c., because the stronger (*viz.* the aces) annuls the weaker : and also, in the want of a lesser quatorze, you may count three aces, three kings, three queens, three knaves, or three tens. Three aces are better than three kings ; and he who has them may by virtue thereof count his three tens, although the adversary may have three kings ; in favour of a quatorze you count not only any lesser quatorze, but also all the threes which you have, except of nines, eights, and sevens. The same is to be observed in regard to the hutiémes, septiémes, sixiémes, quints, quarts, and tierces, to which the player must have regard in his discarding, so that what he takes in may make them for him.

The *point* being selected, the eldest hand declares what it is, and asks if it be good : if his adversary have not so many, he answers *it is good* ; if he have just as many, he answers *it is equal* ; and if he have more, he answers *it is not*

good; for whoever has the point, whether eldest or youngest, counts it first; but if the points be equal, neither can count; it is the same when the players have equal tierces, quarts, quints, &c., and whoever should hold several other sequences, either of the same goodness or lesser, cannot count them.

After the elder hand has counted the point, he should examine if he have not tierce, quart, quint, &c., and then if any quatorze, or three aces, kings, &c., that he may reckon them, should his adversary not hinder him by having better.

The points, the tierces, quarts, quints, &c., are to be shown on the table, that their value may be seen and reckoned; but you are not obliged to show quatorzes, or three aces, kings, queens, knaves, or tens.

After each has examined his game, and the elder, by the questions asked, seen every thing that is good in his hand, he begins to reckon. The carte-blanche is first reckoned, then the point, next the sequences, and lastly the quatorzes, as well as three of aces, kings, &c., after which he begins to play his cards, counting one for each, except it be a nine or an inferior card.

After the elder-hand has led his first card, the younger shows his point, if it be good, also the sequences, quatorzes, or threes of aces, kings, &c., and having reckoned them all together, he takes the first trick, if he can, with the same suit, and counts one for it; if he cannot, the other turns the trick and continues; and when the younger hand can take the trick, he may lead what suit he pleases.

A good player is principally known from an indifferent one by his manner; and it is not possible to play well without knowing the strength of

the game ; that is to say, by your own hand you should know what your adversary may hold, and what he must have discarded, and great notice should be taken of what he has shewn or reckoned. There are no trumps at piquet, but the highest card of the suit if played takes the trick.

Should the elder hand have the misfortune to hold neither point, sequence, quatorze, or threes which are good, he must begin to count by playing that card which he judges most proper, and continue until his adversary has played a superior, to gain the lead in his turn. This method must be continued till all the twelve cards are played, and he who takes the last trick counts two. Then each player counts how many tricks he has taken, and he who has the most reckons the cards ; but should they be equal, neither side can count anything for the cards.

As soon as a deal is finished, each player should mark how many points he has made, and so proceed until the game be completed ; and after every deal the cards must be shuffled and cut for the next ; each player taking his turn, unless the game be concluded in one deal.

When you begin another game, the cards must be cut afresh for the deal, unless it be agreed upon at first, that the deal shall go on.

TERMS USED AT PIQUET.

CAPOT is when either of the players makes every trick, for which he scores forty.

CARDS signify the majority of tricks, which reckon for ten points.

CARTE-BLANCHE means a hand without a court card in the twelve dealt, which counts for ten, and takes place of every thing else.

HUITIEME, eight successive cards of the same suit, counts eighteen points.

PIQUE, is when the elder hand has reckoned thirty in hand, and plays before the adversary has gained one; in which case, instead of thirty it is called sixty, and he adds thereto as many points as are obtained above thirty.

POINT, the greatest number on the cards of the same suit in hand, after having taken in, reckoned by their pips, scores for as many points as cards.

QUART, four cards in sequence of the same suit, counts four points: there are five kinds of quarts, the first called quart-major, consisting of ace, king, queen, and knave; the second quart, of king, queen, knave, and ten; the third quart, of queen, knave, ten, and nine; the fourth quart, of knave, ten, nine, and eight; the fifth, a basse-quart or quart-minor, of ten, nine, eight, and seven.

QATORZE—the four aces, kings, queens, knaves or tens—scores fourteen points.

QUINT means five cards of the same suit in sequence, and reckons fifteen points: there are four sorts of quints; a quint-major of ace, king, queen, knave, and ten, down to knave, ten, nine, eight, and seven, styled a quint-minor.

REPIQUE signifies when one of the players counts thirty or more in hand, before the adversary obtains one, when it is called ninety, reckoning besides as many points above ninety as were gained above thirty in *pique*.

SIXIEME, or six cards of the same suit in sequence, reckons for sixteen points; there are three sorts of sixiémes, *viz.* sixiéme-major from the ace, sixiéme from the king, and sixiéme-minor from the queen.

SEPTIEME, or seven of the same suit in sequence,

counts for seventeen points; there are two sétièmes, one from the ace, the other from the king.

THREES of aces, &c., down to tens, reckon three points.

TALON or STOCK means the eight remaining cards after twelve are dealt to each player.

TIERCE, or sequence of three, reckons for three; there are six kinds of tierces—tierce-major, of ace, king, queen; down to nine, eight, seven, styled tierce-minor.

MR. HOYLE'S GAME AT PIQUET.

1. PLAY by the stages of your game; that is, when behind your adversary, play a pushing game, otherwise you ought to make twenty-seven points elder-hand, and thirteen points younger-hand; and always compare your game with your adversary's, and discard accordingly.

2. Discard in expectation of winning the cards, which generally make twenty-two, or twenty-three points difference: therefore do not discard for low quatorze, such as four queens, four knaves, or four tens, because in any of these cases the odds are 3 to 1, elder-hand, and 17 to 3, younger-hand, that you do not succeed; for if you throw out an ace or a king, you run the risk of losing above twenty points, in expectation of winning fourteen.

3. At the beginning of a party, play to make your game, which is twenty-seven points elder-hand, and thirteen points younger-hand: suppose you are elder-hand, and have a tierce-major, and the seven of any suit, it is 5 to 2 but that you take in one out of any four certain cards; therefore,

if you have three queens, three knaves, or three tens, discard one of them preferably to the seven of such a suit, because it is 3 to 1 that you do not take in any one certain card, elder-hand, to make you a quatorze, and consequently you would discard the seven to great disadvantage.

4. Should your adversary be considerably before you in the game, the consideration of the cards must be put quite out of the question ; therefore, suppose you should have a quart to a queen, or to a knave ; it is only about 5 to 4, being elder-hand, but that you take in a card to make you a quint, about 3 to 1 but that you take in a queen, a knave, or ten ; and should you have three of either dealt you, push for the game, particularly if it be so far advanced as to give you but little chance in another deal ; and in this, and other cases, have recourse to the calculations ascertaining the odds.

5. Gaining the point, generally makes ten difference ; therefore, when you discard, endeavour to gain it, but do not risk losing the cards.

6. Saving your lurch, or lurching your adversary, is so material, that you ought always to risk some points to accomplish either of them.

7. If you have six tricks, with any winning card in your hand, play that card ; because, at least, you would play eleven points to one against yourself by not so doing, unless in play you discover what cards your adversary has laid out.

8. Should you be greatly advanced in the game, as for instance 80 to 50, in that case let your adversary gain two points for one as often as you can, especially should you in the next deal be elder-hand ; but if, on the contrary, younger hand, and your game be 86 to 50 or 60, never regard

losing two or three points for the gaining of one, because that point brings you within your show.

9. The younger-hand is to play upon the defensive; therefore, in order to make his thirteen points, he is to carry tierces, quarts, and especially strive for the point; but suppose him to have two tierces, from a king, queen, or knave, as it is 29 to 28 that he succeeds, he having in that case four certain cards to take in, to make him a quart to either of them, and, perhaps, thereby save a pique, &c., he ought preferably to go for that which he has the most chance to succeed in; but if he have three queens, knaves, or tens, and should attempt to carry any of them preferably to others, the odds that he does not succeed being 17 to 3 against him, he discards to a great disadvantage.

10. The elder or younger-hand should sometimes sink one of his points a tierce or three kings, queens, knaves, or tens, in hopes of winning the cards; but that is to be done with judgment, and without hesitating.

11. It is often good play for a younger hand not to call three queens, knaves, &c. also to sink one card, of his point, which his adversary may suppose to be a guard to a king or queen.

12. The younger-hand having the cards equally dealt him should not take in any card, if thereby he run the risk of losing them, unless he should be very backward, and have a scheme for a great game.

13. Should the younger-hand have a probability of saving or winning the cards by a deep discard; as, for example, suppose he should have the king, queen, and nine, and the king, knave, and nine of a suit; in this case he may discard either of those suits, with a moral certainty of not being

attacked in them ; and the odds, that he does take in the ace of either of those suits being against him, it is not worth while to discard otherwise in expectation of succeeding.

14. The younger-hand having three aces dealt him, it is generally best to throw out the fourth suit.

15. The younger-hand is generally to carry guard to his queen-suits, in order to make points, and save the cards.

16. When the younger-hand observes that the elder-hand, by calling his point, has five cards, which will make five tricks in play, and may also have the ace and queen of another suit, he should throw away the guard to the king of the same, especially should he have put out one of that suit, which will give him an even chance of saving the cards.

17. Should the elder-hand have a quart to a king dealt him with two other kings and queens, and be obliged to discard either one of his quart to the king, or a king or queen, the chance for taking in the ace or nine to his quart being one out of two certain cards, is exactly equal to the taking either a king or a queen, having three of each dealt him ; therefore he is to discard in such a manner as will give him the fairest probability of winning the cards. This may be deemed a general direction in all cases of the like nature, either for the elder or younger hand.

18. Suppose the elder-hand to have taken in his five cards, and to have ace, king, and knave of a suit, having discarded two of the same ; and has also the ace, king, knave, and two small cards of another, but no winning cards in the other suits, he should then always play from that of which he has the fewest in number ; because, if his adver-

sary prove guarded there, probably he is unguarded in the other ; but should the elder-hand lead from the suit of which he has the most, and find his adversary's queen guarded, in that case he has no chance to save or win the cards.

19. If the elder-hand be sure to make the cards equal, by playing in any particular manner, and if advanced before his adversary in the game, he should not risk losing them ; but if his adversary be greatly before him, in that case his interest is to risk losing the cards, in expectation of winning them.

PARTICULAR RULES AND CASES.

1. Suppose, being elder-hand, you have a quart-major dealt you, with the seven and eight of clubs, king and ten of diamonds, the king and nine of hearts, with the ten and nine of spades ; then if you throw out one card of your point, there is a possibility that you reckon only five, and that your adversary may win the cards, by which he gets eleven points, besides his three aces, &c., which gives you a bad chance for the game ; but by leaving a card, and admitting that one card of consequence lies in the five which you are entitled to take in, it follows, that you have four chances to one against leaving that particular card, and consequently it is your interest to leave a card ; the odds are also greatly in your favour, that you take in some one of the following in your four cards, *viz.* there are two to your points, three aces and one king.

2. If you should happen to have the ace, king, and four small cards of any suit, with two other kings, and no great suits against you, the same method as in the former case may be practised.

3. Suppose you have the king, queen, and four of the smallest clubs, the king and queen of diamonds, the ace and knave of hearts, and the king and nine of spades, throw out the queen and four small clubs, and keep three entire suits with the king of clubs ; for this reason, because the chance of your taking in the fourth king is exactly the same as the chance of taking in the ace of clubs ; in either of which cases it is 3 to 1 against you ; but if you fail of taking in the fourth king, you, by discarding thus, have a fair chance to win the cards, which will probably make twenty-two points difference. But should you discard with an expectation of taking in the ace of clubs, and happen to fail, by being obliged to throw out some of your great cards, you would have a very distant chance of either saving or winning the cards.

4. Suppose you should have the king and queen of clubs, a tierce-major in diamonds, queen and knave of hearts, and a quint from a knave of spades, throw out the quint from a knave, in order to make the most points ; because admitting that your quint should be good for every thing after you have taken in, you would in that case only score nineteen points, and you probably give the cards up, and also the chance of the quatorze of queens, besides a great number of points in play.

5. Suppose you have the king, queen, seven, eight, and nine of clubs ; the queen and knave of diamonds ; the queen, ten, and nine of hearts, with the ace and nine of spades, discard the king, seven, eight, and nine of clubs, and the nine of spades ; by which you not only go for three suits, but have the same chance for taking in the fourth queen, as you would have to take in the ace of clubs ; be-

sides, the probability of winning the cards is greatly in your favour.

6. Suppose you have the queen, ten, nine, eight, and seven of clubs ; the knave and ten of diamonds ; the king, queen, and knave of hearts, with the ace and nine of spades, discard the five of clubs ; because it is 3 to 1 that you do not take in the knave of clubs ; and holding three entire suits gives you a fairer chance to score more points.

7. Suppose you have the ace, queen, and knave of clubs ; the king, queen, and knave of diamonds ; the queen and knave of hearts, with the ten, nine, eight, and seven of spades, discard the ace of clubs and the four of spades, because it is only 5 to 4 but that you take in a queen or a knave ; it is also about 3 to 2 that you take in an ace ; you have also three cards to your tierce to a king to take in, *viz.* the ace and ten, or the ten and nine, to make you a quint ; all which circumstances considered, you have a fair probability of making a great game ; whereas, by throwing out the four spades only, you run the risk of leaving one of the following cards, *viz.* the king of clubs, the ace of diamonds, the ace, queen, or knave of spades ; in any of which cases you would probably lose more points than by throwing out the ace of clubs : and if you should hold two suits, *viz.* three clubs, three diamonds, and the queen of hearts, you run the risk of putting out fourteen points ; and it is only 5 to 4 against your taking in a queen or a knave, and therefore you would discard to a great disadvantage.

8. Suppose you have the king, queen, and ten of a suit, and your adversary has the ace, knave, and one small card of the same ; and that you have only those three cards left, and are to make three points of them ; play the ten.

9. Suppose you have the ace, queen, ten, and nine of clubs, also the king, queen, ten, and nine of diamonds; keep the king, queen, ten, and nine of diamonds; because the chance of taking in the ace or knave of diamonds is exactly equal to that of taking in the king or knave of clubs; by which manner of discarding you may perhaps score fifteen points for your quint in diamonds, instead of four for the quart in clubs; and the chance of winning the cards is better; because, by taking in the ace of diamonds you have seven tricks certain, which cannot happen by taking in the king of clubs.

10. Suppose you have four aces and two kings dealt you, younger-hand; in order to capot the elder-hand, make a deep discard, such as the queen, ten, and eight of a suit; by which, if you happen not to take in any card to such suit, you may probably capot the adversary.

11. Suppose, being elder-hand, that you have the ace, queen, seven, eight, and nine of clubs, also the ace, knave, seven, eight, and nine of diamonds; keep the ace, knave, seven, eight, and nine of diamonds; because taking in the king of diamonds is equal to the taking in the king of clubs, and consequently as good for winning the cards; but you have the chance of taking in the ten of diamonds to make you fifteen points, which cannot happen by taking in any one certain card in clubs.

12. Suppose being elder-hand, that you have the ace, queen, seven, eight, and ten of clubs, also the ace, knave, seven, eight, and ten of diamonds, keep the ace, knave, seven, eight, and ten of diamonds for the reasons given in No. 11.

13. Suppose, you have the ace, queen, ten, and two more of any suit; also the ace, queen, and ten of another only, and that your adversary has

shown six cards for his point; suppose the ace, queen, and four small ones, and you are guarded in that suit; as soon as you have the lead, play from the suit of which you have the fewest, for the reason stated in case 18, page 194, because thereby you may obtain the cards: but if your opponent be guarded in both suits, you have no chance to win.

COMPUTATIONS TO DISCARD WELL.

In our investigation of the various chances which the complicated nature of this game induces, we must have recourse to the method of calculation adopted in our view of the Lottery of France; in pursuance of which, we may lay down the different combinations which twenty cards (twelve in the adversary's hand, and eight on the board), admit; thus :—

1st. No. of combinations } of 20 cards, 2 & 2, is..	$\frac{20 \cdot 19}{1 \cdot 2}$	=	190
No. of combinations of 5 } cards, 2 & 2, is.....	$\frac{5 \cdot 4}{1 \cdot 2}$	=	10
And No. of combinations } of 3 cards, 2 & 2, is....	$\frac{3 \cdot 2}{1 \cdot 2}$	=	3
2d. No. of combinations } of 20 cards, 3 & 3, is...	$\frac{20 \cdot 19 \cdot 18}{1 \cdot 2 \cdot 3}$	=	1140
No. of combinations of 5 } cards, 3 & 3, is.....	$\frac{5 \cdot 4 \cdot 3}{1 \cdot 2 \cdot 3}$	=	10
And No. of combinations } of 3 cards, 3 & 3, is....	$\frac{3 \cdot 2 \cdot 1}{1 \cdot 2 \cdot 3}$	=	1
3d. No. of combinations } of 20 cards, 4 & 4, is ..	$\frac{20 \cdot 19 \cdot 18 \cdot 17}{1 \cdot 2 \cdot 3 \cdot 4}$	=	4845
And No. of combinations } of 5 cards, 4 & 4, is....	$\frac{5 \cdot 4 \cdot 3 \cdot 2}{1 \cdot 2 \cdot 3 \cdot 4}$	=	5

4th. No. of combinations } $\frac{20 \cdot 19 \cdot 18 \cdot 17 \cdot 16}{1 \cdot 2 \cdot 3 \cdot 4 \cdot 5} = 15504$
 of 20 cards, 5 & 5, is.. }

And No. of combinations } $\frac{5 \cdot 4 \cdot 3 \cdot 2 \cdot 1}{1 \cdot 2 \cdot 3 \cdot 4 \cdot 5} = 1$
 of 5 cards, 5 & 5, is.... }

from which data we may deduce the chance of the elder or younger hands taking in any given number of cards.

I. The probability of the *elder hand* taking in *One* certain card, is 5 to $(12+3)$ or 3 to 1 against him.

Two certain cards, is 10 to $(190-10)$ or 18 to 1 against him.

Three certain cards, is 10 $(1140-10)$ or 113 to 1 against him.

Four certain cards, is 5 to $(4845-5)$ or 968 to 1 against him.

Five certain cards, is 1 to $(15,504-1)$ or 15503 to 1 against him.

II. And the probability of the *younger hand* taking in

One certain card, is 3 to $(12+5)$ or 17 to 3 against him.

Two certain cards, is 3 to $(190-3)$ or about 62 to 1 against him.

Three certain cards, is 1 to $(1140-1)$ or 1139 to 1 against him.

(A).

But in order to enter into a calculation of the probabilities which the elder hand or the dealer may have of taking in *one or more of a particular class* (aces, for instance), we must premise that the chance of taking in from 20 cards, *where the elder hand has no ace, king, &c.,*

4 aces, kings, &c. and 1 other, is $\frac{4 \cdot 3 \cdot 2 \cdot 1}{1 \cdot 2 \cdot 3 \cdot 4} \left(\frac{16}{1}\right) = 16$

3 aces, kings, &c. and 2 others, is $\frac{4 \cdot 3 \cdot 2}{1 \cdot 2 \cdot 3} \left(\frac{16 \cdot 15}{1 \cdot 2} \right) = 480$

2 aces, kings, &c. and 3 others, is $\frac{4 \cdot 3}{1 \cdot 2} \left(\frac{16 \cdot 15 \cdot 14}{1 \cdot 2 \cdot 3} \right) = 3360$

1 ace, king, &c. and 4 others, is $\frac{1}{4} \left(\frac{16 \cdot 15 \cdot 14 \cdot 13}{1 \cdot 2 \cdot 3 \cdot 4} \right) = 7280$

III. Now, as there are 15504 combinations in twenty cards, taken five and five together, we find what are the odds that an elder hand takes in (supposing him to have none of the specified class in his own hand).

4 aces, kings, &c. ($\frac{16}{15504}$ to $\frac{15504 - 6}{15504}$ or) 968 to 1
against him.

3, &c. or more ($\frac{480 + 16}{15504}$ to $\frac{15504 - (480 + 16)}{15504}$ or)
nearly 33 to 1 against him.

2, &c. or more ($\frac{3360 + 496}{15504}$ to $\frac{15504 - 3556}{15504}$ or)
about 3 to 1 against him.

1, &c. or more ($\frac{7280 + 3856}{15504}$ to $\frac{15504 - 11136}{15504}$ or)
about 5 to 2 for him.

(B).

But where *the elder hand has one ace, &c. dealt him*, we must premise that the chance of his taking from twenty cards in this case,

3 aces, &c. and 2 others, is..... $\frac{3 \cdot 2 \cdot 1}{1 \cdot 2 \cdot 3} \left(\frac{17 \cdot 16}{1 \cdot 2} \right) = 136$

2 aces, &c. and 2 others, is $\frac{3 \cdot 2}{1 \cdot 2} \left(\frac{17 \cdot 16 \cdot 15}{1 \cdot 2 \cdot 3} \right) = 2040$

1 ace, &c. and 4 others, is $\frac{3}{1} \left(\frac{17 \cdot 16 \cdot 15 \cdot 14}{1 \cdot 2 \cdot 3 \cdot 4} \right) = 7140$

IV. Now, by the same principle adopted in III.,

we find what are the odds that an *elder hand having one ace, &c.* dealt him, takes in

3 aces, king, &c. ($\frac{136}{15504}$ to $\frac{15504-136}{15504}$ or) 113 to 1 against him.

2 aces, &c. or more ($\frac{2040+136}{15504}$ to $\frac{15504-2176}{15504}$ or)
about 6 to 1 against him.

1 ace, &c. or more ($\frac{2176+7140}{15504}$ to $\frac{15504-9316}{15504}$ or)
about 3 to 2 for him.

(C).

But where the *elder hand has two aces, &c. dealt him*, we must premise his chance to be

2 aces, kings, &c. and } $2 \cdot 1$ ($\frac{18 \cdot 17 \cdot 16}{1 \cdot 2 \cdot 3}$) = 816
3 others, is }

1 ace, king, &c. and 4 } $\frac{1}{2} (\frac{18 \cdot 17 \cdot 16 \cdot 15}{1 \cdot 2 \cdot 3 \cdot 4})$ = 6120
others, is }

V. So that if *an elder hand has two aces, &c. dealt*, the odds are that he takes in

2 aces, kings, &c. ($\frac{816}{15504}$ to $\frac{15504-816}{15504}$ or) 18 to 1
against him.

1 ace, king, or more ($\frac{816+6120}{15504}$ to $\frac{15504-6936}{15504}$ or)
about 5 to 4 against him.

VI. In case the elder hand has two aces and two kings dealt him, what are the odds that he take in either the two aces, or two kings remaining?

To calculate this, by doubling his number of chances of taking in two aces in (C), we have the answer:—

viz. $\frac{816 \times 2}{15504}$ to $\frac{15504-816 \times 2}{15504}$ or) 17 to 2 against
him.

Again, in order to calculate what are the chances of the elder hand, who has neither one of the two specified class, taking in one of each, two particular suits (an ace and a king) we must premise that an ace and a king may occur together.

(1) Where *two* cards are taken in, *viz.* $\frac{4}{1} \cdot \frac{4}{1} = 16$ ways.

(2) Where *three* cards are taken in, thus—

$$\begin{aligned} & \text{1 ace, 1 king, 1 other, } \dots \left. \frac{4 \cdot 4 \cdot 12}{1 \cdot 1 \cdot 1} \right\} = 162 + 24 + 24 \\ & \text{Or 1 ace, 2 kings } \dots \dots \left. \frac{4 \cdot 4 \cdot 3}{1 \cdot 1 \cdot 2} \right\} \text{ or } 240 \text{ ways.} \\ & \text{Or 1 king, 2 aces } \dots \dots \left. \frac{4 \cdot 4 \cdot 3}{1 \cdot 1 \cdot 2} \right\} \end{aligned}$$

(D).

(3) Where *four* cards are taken in, thus

$$\begin{aligned} & \text{2 aces, 2 kings } \dots \dots \left. \frac{4 \cdot 3 \cdot 4 \cdot 3}{1 \cdot 2 \cdot 1 \cdot 2} \right\} = 36 + 1056 + 576 \\ & \text{Or 1 ace, 1 king, } \left. \frac{4 \cdot 4 \cdot (12 \cdot 11)}{1 \cdot 1 \cdot 1 \cdot 2} \right\} \text{ or } 1668 \text{ ways.} \\ & \text{2 others } \dots \dots \\ & \text{1 ace, 2 kings, 1 other, } \left. \frac{4 \cdot 4 \cdot 3 \cdot 12}{1 \cdot 1 \cdot 2 \cdot 1} \times 2 \right\} \end{aligned}$$

(4) Where *five* cards are taken in, by reference to (A),

In $\frac{7280 + 3856}{2}$ or 11136 different ways.

VII. Hence an elder-hand, having neither ace nor king dealt him, we find his chance to take in both an ace and a king, or more,

In *two* cards, is (16 to (190—16) or) about 11 to 1 against him.

In *three* cards, is (240 to (1140—240) or) about 4 to 1 against him.

In *four* cards, is (1668 to (4845—1668) or) about 9 to 5 against him.

In five cards, is (11136 to (15504—11136) or) about 33 to 31 against him.

(E).

Again, in order to calculate the probability which the dealer, having no ace, &c. dealt him, has of taking in an ace, king, &c. or more, we must premise that the chance of taking in from twenty cards

$$1 \text{ ace and } 2 \text{ others, is } \dots \dots \frac{4}{1} \left(\frac{16 \cdot 15}{1 \cdot 2} \right) = 480$$

$$2 \text{ aces, &c. and } 1 \text{ other, is } \frac{4 \cdot 3}{1 \cdot 2} \left(\frac{16}{1} \right) = 96$$

$$3 \text{ aces, is } \dots \dots \dots \frac{4 \cdot 3 \cdot 2}{1 \cdot 2 \cdot 3} = 4$$

(F).

VIII. Hence we find that the probability of the dealer, having no ace, &c. dealt him, taking in one or more, is

$(480 + 96 + 4)$ to (1140—580) or 29 to 28 for him.

And if the dealer has one ace, &c. dealt him, we may premise that his chance of taking from twenty cards,

$$3 \text{ aces, &c. is } \dots \dots \dots \frac{3 \cdot 2 \cdot 1}{1 \cdot 2 \cdot 3} = 1$$

$$2 \text{ aces and } 1 \text{ other card, is } \frac{3 \cdot 2}{1 \cdot 2} \left(\frac{17}{1} \right) = 51$$

$$1 \text{ ace and } 2 \text{ others, is } \dots \dots \frac{3}{1} \left(\frac{17 \cdot 16}{1 \cdot 2} \right) = 408$$

IX. Hence, if the younger-hand has one ace, &c. dealt him, his chance of taking in,

Two aces, &c. or more, is (52 to (1140—52) or) about 21 to 1 against him.

One ace, &c. or more, is (52 + 408 to (1140—469) or) about 3 to 2 against him.

X. And by the same process of calculation, we

may find the probability of a *carte blanche* to be 1791 to 1.

PROBLEM.

What are the odds that, in drawing five cards from a pack composed of thirty-two cards, I do not draw a quint-major (indeterminate) without specifying the suit?

Find the number of combinations. Thirty-two cards may be taken five and five, and we shall discover that the sum is the product of the five numbers, $28 \times 29 \times 30 \times 31 \times 32 = 201376$; this product, divided by the product of 5 other numbers, 1, 2, 3, 4, 5, or 120, *i.e.* 201376 by 120. Now as there are four quint-majors, we must deduct 4 from 201376, which will give 201372; the odds, therefore, will be — 201372 to 4, or 50343 to 1 that a quint-major is not drawn.

Again, for a certain quint, as there are in all sixteen quints, *viz.* four of each colour, the odds would be 16 to 201376 — 16, or 1 to 12585.

The above problem, if not useful, is at least curious and interesting, and will serve as a model for solving many others of a similar nature.

It is 5 to 4 that the eldest-hand wins the game.

It is 2 to 1 that he wins rather without lurching the other.

It is 4 to 1 the younger-hand wins without lurching.

These odds are restrained to the beginning of the game.

When A and B begin, he who gets the hand has 23 to 20 in his favour of winning the set.

If A has one game and B none, the odds in favour of A before cutting the hand, are 38 to 23

But with the hand..... 16 to 5

If B has the hand, the odds in A's favour are	38 to 23
If A has two games and B none,	
Before cutting	nearly 31 to 7
With the hand	31 to 7
Without the hand	25 to 7
If A has two games and B one,	
Before cutting	15 to 7
With the hand	11 to 4
Without the hand	17 to 10
If both have one, the hand is	27 to 22
If A has two, and B one	5 to 4

EXPLANATION OF THE FOREGOING CALCULATIONS.

1. As it is 3 to 1 that, being elder-hand, you do not take in one certain card; you have, therefore, a better chance of advancing your game, by carrying two suits for points and the cards, than by aiming at quatorze of queens, knaves, or tens.

2. To take in two certain cards elder-hand, is 18 to 1 against you. Therefore, suppose you have a quart-major, and two other aces dealt, the odds that you do not take in the ten to your quart-major, and the other ace, are 18 to 1 against you; but that you take in one of them is only 21 to 17 against you. And suppose you have three aces and three kings dealt, the odds are 18 to 1 against taking in the other ace and the other king: yet it is not much above 5 to 4 but that you take in one of them.

3. The odds in taking in four certain cards, as four aces, &c., is 968 to 1. But to take in three cards, out of any four certain cards, elder-hand, is only 33 to 1 against you. Suppose you have two aces and two kings dealt you, the odds of

taking in three of them out of four certain cards, such as two kings and one ace, or two aces and a king, are 33 to 1 against you. But suppose you should want to take in any two out of four certain cards, being elder-hand it appears by the calculation to be only 3 to 1 against you; though, if you only want one card out of the four, the odds are 5 to 2 in your favour that you take it in. Therefore, if you have four tens, or any inferior quatorze dealt you, and no ace, it is great odds in your favour, that, being elder-hand, you take in one ace, and ought to play your game accordingly: for you must always consider the disadvantage either of losing the cards or running the risk of a capot, by spoiling your hand with keeping four tens when they are not good.

4. If you have one ace dealt you, it is 113 to 1 that you do not take in three others ; 49 to 8, or about 6 to 1, that you do not take in two out of three ; but that you take in one out of the three, is about 3 to 2 in your favour, or 137 to 91. As for example : You have a quart from a king, and two kings more dealt ; as it is 3 to 2 that you take in either ace or nine to your quart, or the fourth king, and as you have the chance of reckoning fourteen or fifteen points by this method of discarding, you ought to play accordingly.

But if you discard with an expectation of taking in two out of three certain cards, the odds against such an event being above 6 to 1, your game must indeed be very desperate, if you discard for that purpose. The chance of taking in three certain cards is very distant, being 113 to 1, yet it happens sometimes.

5. If you have two aces dealt, it is 18 to 1 that you do not take in the other two, but only 21 to 17 that you do not take in one of them. Suppose

you have a quart-major dealt, and a quart to a king, and are greatly behind your adversary, to take in the ten to your quart-major is 3 to 1 : but to take in the ace or nine to your quart to the king is only about 5 to 4 against you. Also, by the same rule, suppose you have three kings and three queens dealt, the odds of taking in both a king and a queen are 18 to 1 ; but that of taking one of them, is only about 5 to 4 against you.

6. As it is 17 to 2 that you do not take in two certain cards out of four, such as two kings, two queens, &c. you must not therefore confound this with the third calculation, where the odds are not above 3 to 1 that you take in two cards out of the four.

7. Having neither an ace nor a king dealt you, the odds of taking in both an ace and a king are, in two cards, about 11 to 1 against you ; in three cards, 4 to 1; in four cards, 9 to 5 : in five cards, 33 to 31.

The foregoing calculation is either for the elder or younger-hand. Suppose the younger-hand to have two quatorzes against him, it is not above 4 to 1 but that he takes in one of each of them. The rule may serve for any other eight certain cards.

8. As it is 62 to 1 that the younger-hand does not take in two certain cards, he ought never to run the hazard of so great a chance, but when the game is desperate.

9. It is 29 to 28 that the younger-hand takes in one ace, having none dealt him ; the calculation is the same for any one out of four certain cards. Suppose you have two quarts dealt from the king or queen of any suit, it is the same odds of 29 to 28, that you take in a card to make one of them a quint ; as also, that you take in either ace, king, queen, or knave of any one suit, when a pique or repique is against you.

10. If the younger hand have an ace dealt, it is 21 to 1 that he does not take in two aces, and about 3 to 2 that he does not take in one of them; which holds good in the taking in any three other certain cards. Therefore, suppose that, as it is but 3 to 2 against the younger-hand taking in one card out of three to save a pique, or a repique, it would generally be good play either to throw one from his point, or discard a king, &c., for the chance of such an event.

11. It is 17 to 3, younger-hand, against taking in any one certain card; therefore the odds of not succeeding in this case are so great, that it ought not to be attempted, especially if the winning or saving the cards be risked by so doing.

CURIOS AND INSTRUCTIVE CASES.

1. SUPPOSE you are younger-hand, and have the queen, knave, seven, eight, and nine of clubs: also the seven and eight of diamonds, the seven of hearts, and the ten, nine, eight, and seven of spades; and that the elder-hand has left a card; keep the five clubs and the four spades, and leave a card; and by taking in the ace, king, and ten of clubs, you repique your adversary.

2. Suppose you have eight clubs, the ace and king of diamonds, the ace of hearts, and the ace of spades. The younger-hand may have a carte-blanche, by having three quarts from a ten, which reckon first, and therefore is not repiqued.

3. The highest number to be made of a pique is 82 points. The cards which compose that number are a quart-major in clubs, a quart-major in diamonds, ace, king, and ten of hearts, with the ace of spades. This is only upon supposition that the quart-major is good for every thing.

4. The highest number to be made of a repique and capot is 170 points. The cards which compose that number are the four tierce-majors, which are supposed to be good for every thing.

5. Suppose you are elder-hand, and want 8 points of the game, and the younger-hand wants 23; and you have the ace, king, and queen of clubs dealt you; the ace, king, and ten of diamonds; the ace, knave, and nine of hearts; the knave, nine, and seven of spades; to prevent any possibility of the younger-hand making 23 points—and he is not to reckon carte-blanche—you are to discard the king and queen of clubs, and knave, nine, and seven of spades, by which method of discarding you are certain to make 8 points before the younger-hand can make 23 points.

6. Suppose you have the ace, queen, and knave, of clubs, with the king and ten of diamonds; and your adversary has the ace, queen, and knave of diamonds, and the king and ten of clubs, he being to lead, is to make 5 points, or to lose the game. To prevent him from making 5 points, when he plays the king of clubs, you are to play the ace; by which means he can only make 4 points.

7. A and B play a party at piquet, and have won one game each. A has it in his power to win the second; but then he will be younger-hand at the beginning of the next game. A has it also in his power to reckon only 99 points of the second game, and B will be 70; it is A's interest to win the second game, in the proportion of 14 to 13 in his favour.

LAWS OF THE GAME OF PIQUET.

1. The elder-hand is obliged to lay out at least one card.

2. If the elder-hand take in one of the three cards, which belong to the younger-hand, he loses the game.

3. If the elder-hand, in taking his five cards, should happen to turn up a card belonging to the younger-hand, he is to reckon nothing that deal.

4. If the elder or younger-hand play with thirteen cards, he counts nothing.

5. Should either of the players have thirteen cards dealt him, it is at the option of the elder-hand to stand the deal or not, and if he choose to stand, then the person having thirteen is to discard one more than he takes in; but should either party have above thirteen cards, then a new deal must take place.

6. If the elder or younger-hand reckon what he has not, he counts nothing.

7. If the elder-hand touch the stock after he has discarded, he cannot alter his discard.

8. If a card be faced, and it be discovered either in the dealing or in the stock, there must be a new deal, unless it be the bottom card.

9. If the dealer turn up a card in dealing, belonging to the elder-hand, it is in the option of the elder-hand to have a new deal.

10. If the younger-hand should take in five cards, it is the loss of his game, unless the elder-hand should have left two cards.

11. If the elder hand should call 41 for his point, which happens to be a quart-major, and it is allowed to be good, and should only reckon 4 for it, and should have played, he is not entitled to count more.

12. If the elder-hand should show a point, or a quart or tierce, ask if they are good, and afterwards forget to reckon any of them, it bars the younger-hand from reckoning any of equal value.

13. *Carte-blanche* counts first, and consequently saves piques and repiques. It also piques and repiques the adversary, in the same manner as if those points were reckoned in any other way.

14. *Carte-blanche* need not be shown till the adversary has discarded; but the elder-hand must bid the younger-hand to discard for *carte-blanche*: which having done, he is to show his blanche by counting the cards down one after another.

15. In cutting for the deal, you are to cut two cards at the least.

16. Should the elder-hand call a point, and not show it, it is not to be reckoned: and the younger-hand may show and reckon his point.

17. If you play with eleven cards, or fewer, no penalty attends it.

18. Should the elder-hand leave a card, and after having taken in should put to his discard the four cards taken in, they must remain with his discard, and he can only play with eight cards.

19. If the younger-hand leave a card or cards, and should mix it with his discard before he has shown it to the elder-hand, who is first to tell him what he will play, the elder-hand is entitled to see his whole discard.

20. If the younger-hand should leave a card or cards, and should not see them, nor mix them with his discard, the elder-hand has no right to see them; but then they must remain separate whilst the cards are playing, and the younger-hand cannot look at them.

21. If the younger-hand should leave a card or cards, and look at them, the elder-hand is entitled to see them, first declaring what suit he will lead.

22. If the dealer should give a card too few, it is in the option of the elder-hand to have a new deal; but should he stand the deal, he must leave three cards for the younger-hand.

23. In the first place, call your point; and if you have 2 points, if you design to reckon the highest, you are to call that first, and are to abide by your first call.

24. You are to call your tierces, quarts, quint, &c., next; and the highest of them first, if you design to reckon them.

25. You are to call a quatorze preferably to three aces, &c., if you design to reckon them.

26. If you call a tierce, having a quart in your hand, you must abide by your first call.

27. Whoever deals twice together, and discovers it previous to seeing his cards, may insist upon his adversary dealing, though the latter may have looked at his cards.

28. Should the pack be found erroneous in any deal, that deal is void; but the preceding deals are valid.

29. The player who at the commencement does not reckon or shew carte-blanche, his point, or any sequence, &c., is not to count them afterwards.

30. No player can discard twice, and after he has touched the stock, he is not allowed to take any of his discard back again.

31. When the elder-hand does not take all his cards, he must specify what number he takes or leaves.

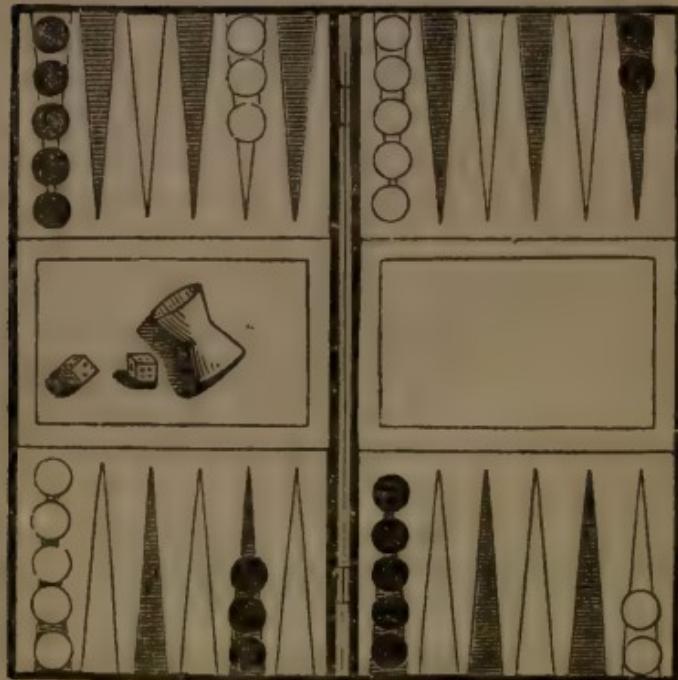
32. Whosoever calls his game wrong and does not correct himself before he plays, is not to reckon any thing that game; but the adversary is to reckon all he has good in his own game.

33. Any card that has touched the board is deemed to be played unless in case of a revoke.

34. Should any player name a suit and then play a different one, the antagonist may call a suit.

35. The player who looks at any card belonging to the stock, is liable to have a suit called.

BACKGAMMON.



A Backgammon Table.

THIS game is played by two persons, with a box and dice, upon a table divided into two parts, or rather four, two inner and two outer tables, upon which there are twelve black and twelve white

points, marked alternately. Each player has fifteen men, black and white, to distinguish them; which are disposed in the tables thus. If you play into the right hand table, two of your men are placed upon the ace-point, in your adversary's inner table; five upon the sixth point, in his outer table; three upon the cinque-point, in your own outer table; and five upon the sixth-point, in your own inner table; and the adversary's men are to be placed so as to correspond with yours, in a direct opposite position, as in the above representation. The grand object is to bring your men round into your own inner table: consequently, all throws that tend to this, and impede your adversary in executing the same design on his part, are in your favour; while the contrary success of your opponent must of course be against you. The first most advantageous throw is aces, as it blocks the sixth-point in your outer table, and secures the cinque-point in your inner table; so that your adversary's two men upon your ace-point cannot escape, with his throwing either quatre, cinque, or six. Accordingly, this throw is often asked and given, between players of unequal skill, by way of odds.

At this game, as at Hazard, it is indispensable for the player to know all the combinations, of which two dice are susceptible, and which will be found on reference to the chapter on that subject.

From the source in question, it will appear that, it is 25 to 11 against hitting one ace upon a certain or flat die. The like method may be taken with any other flat die, as with an ace; for instance—Required the odds of entering a man upon the 1, 2, 3, 4 or 5 points?

	<i>Answer.</i>	<i>Reduced.</i>
	For. Against.	For. Against.
To enter it	upon 1 point is 11 to 25 upon 2 point is 20 to 16 upon 3 point is 27 to 9 upon 4 point is 32 to 4 upon 5 point is 35 to 5	{ or about } 4 to 9 5 to 4 3 to 1 8 to 1 35 to 1

What are the odds of hitting, with any chance, in the reach of a single die?

	<i>Answer.</i>	<i>Reduced.</i>
	For. Against.	For. Against.
To hit	upon 1 is 11 to 25 upon 2 is 12 to 24 upon 3 is 14 to 22 upon 4 is 15 to 21 upon 5 is 15 to 21 upon 6 is 17 to 19	{ or about } 4 to 9 1 to 2 2 to 3 5 to 7 5 to 7 $8\frac{1}{2}$ to $9\frac{1}{2}$

What are the odds of hitting with a double die?

	<i>Answer.</i>	<i>Reduced.</i>
	For. Against.	For. Against.
To hit	upon 7 is 6 to 30 upon 8 is 6 to 30 upon 9 is 5 to 31 upon 10 is 3 to 33 upon 11 is 2 to 34 upon (12 or 2 sixes) 1 to 35	{ or about } 1 to 5 1 to 5 1 to 6 1 to 11 1 to 17 1 to 36

To explain farther how to use the table of 36 chances, to find the odds of being hit upon any certain or flat die, this second example shows how to discover by that the odds of being hit upon a 6.

2 Sixes.....	1	6 and 3 twice	2
2 Trois.....	1	6 and 2 twice	2
2 Deuces	1	6 and 1 twice	2
6 and 5 twice.....	2	5 and 1 twice	2
6 and 4 twice.....	2	4 and 2 twice	2

17 ;

Which, deducted from 36,

The remainder is....19.

That is, it is 19 to 17 against being hit upon a 6.

The odd of 2 love are about 5 to 2

And of 2 to 1 2 to 1

And of 1 love 3 to 1

1. If you play three up, your principal object in the first place, is, either to secure your own or your adversary's cinque point; when that is effected, you may play a pushing game, and endeavour to gammon your opponent.

2. The next best point (after you have gained your cinque-point) is to make your bar-point, thereby preventing your adversary running with two sixes.

3. After you have proceeded thus far, prefer making the quatre-point in your own table, rather than the quatre-point out of it.

4. Having gained these points, you have a fair chance to gammon your adversary, if he be very forward. For, suppose his table to be broken at home, it will be then your interest to open your bar-point, to oblige him to come out of your table with a six; and having your men spread, you not only may catch that man which your adversary brings out of your table, but will also have

a probability of taking up the man left in your table ; upon supposition that he had two men there. And if he should have a blot at home, it will then be your interest not to make up your table ; because, if he should enter upon a blot, which you are to make for the purpose, you will have a probability of getting a third man ; which, if accomplished, will give you at least 4 to 1 of the gammon ; whereas, if you have only two of his men up, the odds are that you do not gammon him.

5. If you play for a hit only, one or two men taken up of your adversary's makes it surer than a greater number, provided your table be made up.

6. *Directions how to carry your men home.*—When you carry your men home, in order to lose no point, you are to carry the most distant man to your adversary's bar-point, that being the first stage you are to place it on ; the next stage is 6 points farther, *viz.* in the place where your adversary's five men are first placed out of his table ; the next stage is upon the sixth point in your table. This method is to be pursued till all your men are brought home, except two, when, by losing a point, you may often put it in the power of two fives or two fours to save your gammon.

7. If you play to win a hit only, endeavour to gain either your own or your adversary's cinque-point ; if that fail by your being hit, and he be forwarder than you, then you must throw more men into his table,—thus; put a man upon your cinque or bar-point, and if your adversary neglect to hit it, you may then gain a forward, instead of a back-game ; but if he hit you, you must play for a back-game, and then the greater the number of men which are thus taken up, the better is your

game, because you by that means preserve your game at home ; and you must then always endeavour to gain both your adversary's ace and trois-points, or his ace and deuce-points, and take care to keep three men upon his ace-point, that if you chance to hit him from thence, that point may remain still secure to you.

8. At the beginning of a set, do not play for a back-game, because by so doing you would play to a great disadvantage, running the risk of a gammon to win a single hit.

DIRECTIONS FOR PLAYING, AT SETTING OUT, THE
36 CHANCES OF THE DICE, EITHER FOR A GAM-
MON, OR SINGLE HIT.

1. Two aces to be played on your cinque-point and bar-point, for either gammon or hit.
2. Two sixes to be played on your adversary's bar-point, and on your own bar-point, for a gammon or hit.
3. Two trois, two to be played on your cinque-points, and the other two on your trois-point in your own table, for a gammon only.
4. † Two deuces to be played on your quatre-point in your own table, and two to be brought over from the five men placed in your adversary's outer table, for a gammon only.
5. ‡ Two fours to be brought over from the five men placed in your adversary's outer table, and to be put upon the cinque-point in your own table, for a gammon only.
6. Two fives to be brought over from the five men placed in your adversary's outer table, and to be put upon the trois-point in your own table, for a gammon or hit.

7. Six-ace, you are to make your bar-point, for a gammon or hit.

8. Six-deuce, a man to be brought from the five placed in your adversary's outer table, and to be placed on the cinque-point in your own table, for a gammon or hit.

9. Six and three, a man to be brought from your adversary's ace-point, as far as he will go, for a gammon or hit.

10. Six and four, a man to be brought from your adversary's ace-point, as far as he will go, for a gammon or hit.

11. Six and five, a man to be carried from your adversary's ace-point, as far as he can go, for a gammon or hit.

12. Cinque and quatre, a man to be carried from your adversary's ace-point, as far as he can go, for a gammon or hit.

13. Cinque-trois, make the trois-point in your table, for a gammon or hit.

14. Cinque-deuce, play two men, from the five placed in your adversary's outer table, for a gammon or hit.

15. *Cinque-ace, bring one man from the five placed in your adversary's outer table for the cinque, and play one down on the cinque-point in your own table, for the ace, for a gammon only.

16. Quatre-trois, bring two men from the five placed in your adversary's outer table, for a gammon or hit.

17. Quatre-deuce, make the quatre-point in your own table, for a gammon or hit.

18. † Quatre-ace, play a man from the five placed in your adversary's outer table for the quatre, and for the ace play a man down upon the cinque-point in your own table, for a gammon only.

19. Trois-deuce, bring two men from the five placed in your adversary's outer table, for a gammon only.

20. Trois-ace, make the cinque-point in your own table for a gammon or hit.

21. * Deuce-ace, play one man from the five placed in your adversary's outer table for the deuce; and for the ace, play a man down upon the cinque-point in your own table, for a gammon only.

DIRECTIONS HOW TO PLAY THE CHANCES THAT ARE MARKED THUS (*), FOR A HIT ONLY.

1. *Two trois, play two of them on the cinque-point in your own, and with the other two take the quartre-point in your adversary's table.

2 †Two deuces, play two of them on the quatre-point in your own, and with the other two take the trois-point in your adversary's table.

By playing the two foregoing cases as directed, you avoid being shut up in your adversary's table, and have the chance of throwing high doublets, to win the hit.

3. *Two fours, two of them are to take your adversary's cinque-point in his table; and for the other two bring two men from the five placed in your adversary's outer table.

4. * 1. Cinque-ace, play the cinque from the five men placed in your adversary's outer table, and the ace from your adversary's ace-point.

5. 2. Quatre-ace, play the quatre from the five men placed in your adversary's outer table, and the ace from those on your adversary's ace-point.

6. * 3. Deuce-ace, play the deuce from the five men placed in your adversary's outer table, and the ace from your adversary's ace-point.

N. B. The three last chances are to be played in this manner, because, by laying an ace down in your adversary's table you have a probability of throwing deuce-ace, trois-deuce, quatre-trois, or six-cinque, in two or three throws: in any of which cases you are to make a point, which gives you the better of the hit; and observe by the directions given in this chapter, that you are to play nine chances out of the thirty-six in a different manner, for a single hit, to what you would do when playing for a gammon.

SOME OBSERVATIONS, HINTS, AND CAUTIONS.

1. By the directions given to play for a gammon, you are voluntarily to make some blots; the odds being in your favour that they are not hit; but should that so happen, in such case, you will have three men in your adversary's table; you must then endeavour to secure your adversary's cinque, quatre, or trois-point, to prevent a gammon, and must be very cautious how you suffer him to take up a fourth man.

2. Take care not to crowd your game, that is, putting many men either upon your trois or deuce-point in your own table; which is, in effect, losing those men by not having them in play. Besides, by crowding your game, you are often gammoned; as, when your adversary finds your game open, by being crowded in your own table, he may then play as he thinks fit.

3. By referring to the calculations, you may know the odds of entering a single man upon any certain number of points, and play your game accordingly.

4. If you are obliged to leave a blot, by having

recourse to the calculations for hitting it, you will find the chances for and against you.

5. You will also find the odds for and against being hit by double dice, and consequently can choose a method of play most to your advantage.

6. If it be necessary to make a run, in order to win a hit, and you would know who is forwardest, begin with reckoning how many points you must have to bring home to the six-point in your table the man that is at the greatest distance, and do the like by every other man abroad; when the numbers are summed up, add for those already on your own tables (supposing the men that were abroad as on your 6 point for bearing), namely, six for every man on the six, and so on respectively for each; five, four, three, two, or one, for every man, according to the points on which they are situated. Do the like to your adversary's game, and then you will know which of you is forwardest and likeliest to win the hit.

OBSERVATIONS AND DIRECTIONS FOR A LEARNER TO BEAR HIS MEN.

1. IF your adversary be greatly before you, never play a man from your quatre, trois, or deuce-points, in order to bear that man from the point where you put it, because nothing but high doublets can give you any chance for the hit; therefore, instead of playing an ace or a deuce from any of the aforesaid points, always play them from your highest point; by which means, throwing two fives, or two fours, will, upon having eased your six and cinque-points, be of great advantage: whereas, had your six-point remained

loaded, you must perhaps be obliged to play at length those fives and fours.

2. Whenever you have taken up two of your adversary's men, and happen to have two, three, or more points made in your own table, never fail spreading your men, either to take a new point in your table, or to hit the man your adversary may happen to enter. As soon as he enters one, compare his game with yours; and if you find your game equal, or better, take the man if you can, because it is 25 to 11 against his hitting you; which being so much in your favour, you ought always to run that risk, when you have already two of his men up: except you play for a single hit only, and playing that throw otherwise gives you a better chance for the hit, then do not take up that man.

3. Never be deterred from taking up any one man of your adversary by the apprehension of being hit with double dice, because the fairest probability is 5 to 1 against him.

4. If you should happen to have five points in your table, and to have taken up one of your adversary's men, and are obliged to leave a blot out of your table, rather leave it upon doublets than any other, because doublets are 35 to 1 against his hitting you, and any other chance is but 17 to 1 against him.

5. Two of your adversary's men in your table are better for a hit than any greater number, provided your game be the forwardest; because having three or more men in your table gives him more chances to hit you, than if he had only two men.

6. If you are to leave a blot upon entering a man on your adversary's table; and have your choice where, always choose that point which is the most disadvantageous to him. To illustrate

this, suppose it is his interest to hit or take you up as soon as you enter : in that case leave the blot upon his lowest point : that is to say, upon his deuce, rather than upon his trois, and so on, because all the men your adversary plays upon his trois or his deuce points, are in a great measure out of play, these men not having it in their power to make his cinque-point, and consequently his game will be crowded there and open elsewhere, whereby you will be able also much to annoy him.

7. Prevent your adversary from bearing his men to the greatest advantage, when you are running to save a gammon ; suppose you should have two men upon his ace-point, and several others abroad ; though you should lose one point or two in putting the men into your table, yet it is your interest to leave a man upon the adversary's ace-point ; which will prevent him bearing his men to his greatest advantage, and will also give you the chance of his making a blot, that you may hit. But if, upon calculation, you find you have a throw, or a probability of saving your gammon, never wait for a blot, because the odds are greatly against hitting it.

CASES SHOWING HOW TO CALCULATE THE ODDS.

1. SUPPOSE your table made up, and that you have taken up one of your adversary's men, who has so many abroad as require three throws to put them in his table ; it is then about an equal wager that you gammon him. Because, in all probability, you will bear two men before you open your table, and when you bear the third man, you will be obliged to open your six or cinque-point ; in that case it is likely that your

adversary must take two throws before he enters his man in your table, and two throws more before he puts that man into his own table, and three throws more to put into his own table the men which he has abroad—in all, seven throws : and as you have twelve men to bear, these probably will take seven throws in bearing, because you may twice be obliged to make an ace, or a deuce, before you can bear all.

N.B. No mention is made of doublets on either side, that event being equal to each party.

The foregoing case shows it is in your power to calculate very nearly the odds of saving or winning a gammon upon most occasions.

2. Suppose you have three men upon your adversary's ace-point, and five points in your table, and that the adversary has all his men in his table, three upon each of his five highest points ; what is the probability for a gammon ?

	Points.
For his bearing three men from his 6 point, is 18	
Ditto from his 5 point, is 15	
Ditto from his 4 point, is 12	
Ditto from his 3 point, is 9	
Ditto from his 2 point, is 6	
	<hr/>
Total....	60

To bring your three men from the adversary's ace-point to the six-point in your table, being for each 18 points, makes in all 54

The remainder is.... 6

And as, besides the six points in your favour, there is a further consideration, that your adversary may make one or two bolts in bearing, you have greatly the probability of saving your gammon.

N. B.—This is supposed upon an equality of throwing.

3. Suppose I leave two blots, either of which cannot be hit but by double dice; to hit the one, that cast must be eight, and for the other nine; by which means my adversary has only one die to hit either of them—what are the odds of hitting either of them?

Ans. The chances on two dice are in all 36.

The chances to hit 8 are	{	6 and 2 twice.....	2
		5 and 3 twice.....	2
		2 deuces.....	1
		2 fours.....	1
The chances to hit 9 are	{	6 and 3 twice.....	2
		5 and 4 twice.....	2
		2 trois	1
			—
		Total chances for hitting.....	11
		Remain chances for not hitting....	25

So that it is 25 to 11 that he will not hit either blot.

4. Suppose I leave two other blots than the former, which cannot be hit but by double dice, the one by eight, and the other by seven. What are the odds of my adversary hitting either of these blots?

Ans. The chances on two dice are in all 36.

The chances to hit 8 are	{	6 and 2 twice.....	2
		5 and 3 twice.....	2
		two fours.....	1
		two deuces.....	1
The chances to hit 7 are	{	6 and 1 twice	2
		5 and 2 twice	2
		4 and 3 twice	2
			—
		Total chances for hitting.....	12
		Remain chances for not hitting...	24

Therefore, it is 2 to 1 that I am not hit.

Take the like method with three, four, or five blots upon double dice ; or with blots made upon double and single dice at the same time : then only find out (by the table of 36 chances) how many there are to hit any of those, and, by adding all together in one sum, and then subtracting from the number 36 the whole of the chances upon two dice, you resolve any question required.

CRITICAL CASES FOR A BACK GAME.

1. Suppose A plays the fore-game, and that all his men are placed in the usual manner. For B's game, suppose that fourteen of his men are placed upon his adversary's ace-point, and one upon his adversary's deuce-point, and that B is to throw. Which game is likeliest to win the hit ?

Ans. A's is the best by 21 *for*, to 20 *against* ; because, if B misses an ace to take his adversary's deuce-point, which is 25 to 11 against him, A is in that case to take up B's men in his table, either singly or to make points : and if B secures either A's deuce or trois-point, then A is to lay as many men down as possible, in order to be hit, that thereby he may get a back-game.

When well versed in the game of Backgammon, by practising this back game you will become a greater proficient than by any other method, because it clearly demonstrates the whole power of the back-game.

2. *Back Game.*—Suppose A to have five men placed upon his six-point, five men upon his quatre-point, and five men upon his deuce-point ; and that B has three men placed upon A's ace-point, three men upon A's trois-point, and three men upon A's cinque-point ; let B also have three men

upon his six-point, in his own table, and three men placed out of his table, in the usual manner. Who has the better of the hit?

Ans. It is an equal game; but to play it critically, the difficulty lies upon B, who should, in the first place, endeavour to gain the cinque and quatre-points in his own table; and when that is effected, he is to play two men from A's cinque-point, in order to oblige him to blot, by throwing an ace, which if B hits, he will have the fairest probability of winning.

3. *Back Game.*—Suppose A has three men upon B's ace-point, and three men upon B's deuce-point, also three men upon his six-point in his own table, and three men upon his usual point out of his table, and three men where his five men are usually placed in his adversary's outer table; and suppose B has his men placed in the same manner, with this difference only, instead of having three men put upon A's deuce-point, let B have three men upon A's trois-point. Who has the best of the hit?

Ans. A; because the ace and trois-points are not so good for a hit, as the ace and deuce-points in B's table; for when you are bearing the men, you have the deuce-point in your own table to play them upon, that often prevents you from making a blot, which must happen otherwise to the adversary; and take care to lay down men to be hit as often as you can, in order to keep your game backward; and for the same reason, avoid hitting any blots which your adversary makes.

4. *Cases of curiosity and instruction.*—Suppose A has his fifteen men upon B's ace-point, B is supposed to have his bar-point, also his six, cinque, quatre, and trois-points in his own table. How many throws is A likely to take to bring

his fifteen men into his own table, and to bear them?

Ans. He may undertake to do it in 75 throws.

It is odds in A's favour that he throws an ace in twice; and also that he throws a six in two more throws; when these events happen, A has a probability of not wanting above two or three throws before he has got all his fifteen men into his own tables; therefore, by a former rule laid down to bring your men home, and also for bearing them, you may be able to find out the probability of the number of throws required. See pages 218 and 223. *Note*—B stands still, and does not play.

5. Where A and B shall play fast as usual, and yet the hit may last for many hours.

Suppose B to have borne thirteen men, and that A has taken up the two remaining men. And also that A has fifteen men in B's table, *viz.* three upon his six, three upon his cinque, three upon his quatre, three upon his trois, two upon his deuce, and one upon his ace-point. Let A bring his fifteen men home, by always securing six close points, till B has entered his two men, and brought them upon any certain point; as soon as B has done that, A must open an ace, deuce, or trois, or all three; which effected, B hits one of them, and A, taking care to have two or three men in B's table, is ready to hit that man; and also, he being assured of taking up the other man, has it in his power to prolong the hit to almost any length, provided he takes care not to open such points as two fours, two fives, or two sixes, but always to open the ace, deuce, or trois-points for B to hit.

6. *Back Game.*—Suppose A to have two men upon his own six-point, three men upon his usual point in his outer table, two men upon the point

where his five men are generally placed in his adversary's outer table, five men upon his adversary's ace, and three upon his adversary's quatre-point. And B to have two men upon his own six-point, likewise three upon his usual point in his outer table, two upon the point where his five are commonly placed in his adversary's outer table, five upon his adversary's ace, and three men upon his adversary's trois-point. Who has the fairest chance to win the hit?

Ans. A has ; because he is to play either an ace or a deuce from his adversary's ace-point, in order to make both those points as occasion offers ; and having the quatre-point in his adversary's tables, he may more easily bring those men away, and will also have a resting-place by the convenience of that point, which at all times in the game will give him an opportunity of running for the hit, or staying, if he think proper. Whereas B cannot so readily come from the trois-point in his adversary's tables.

7. Suppose A and B place their men in the following manner for a hit :—A to have three men upon his own six-point, three upon his usual point in his outer table, and nine men upon his adversary's ace, deuce, and trois-points, three upon each ; and suppose B's men to be placed in the same order and manner. The result is, that the best player ought to win the hit ; and the dice are to be thrown for, the situation being perfectly equal in A's and B's game. If A throw first, let him endeavour to gain his adversary's cinque-point ; when that is effected, let him lay as many blots as possible, to tempt B to hit him ; for every time that B hits will be in A's favour, because it puts B backward ; and let A take up none of B's men for the same reason. A should always en-

deavour to have three men upon his adversary's ace and deuce-points; because when B makes a blot, these points will remain secure, and by recourse had to a former case (No. 5, p. 230), when A has borne five, six, or more men, yet A may secure six close points out of his table, in order to prevent B from getting his man home: and by recourse had to the calculations, he may easily find out (in case he makes up his table), who has the better of the hit; and if he find that B is the forwardest, he must then endeavour to lay such blots as may give him a chance for taking up another man, in case B should happen to have a blot at home.

N. B.—Those who play the foregoing game well may be ranked in the first class.

8. A has borne thirteen men, and has two men to bear upon his deuce-point; B has thirteen men in his own tables, with two men to enter. B is to throw, and to name the throws both for himself and A, but not to hit a blot of either side. What throw is B to name for both parties, in order to save his gammon?

Ans. B calls for himself two aces, which enter his two men upon A's ace-point. B also calls two aces for A, and consequently A cannot either bear a man, or play one; then B calls for two sixes for himself, and carries one man home upon the six point in his own table, and the other he places upon his adversary's bar-point: B also calls six-ace for A, so that A has one man left to bear, and then B calls for himself either two sixes, two fives, or two fours, any of which bear a man, in case he has men in his table upon those points.

9. Suppose that both your's and your adversary's tables are made up. Also that you have one man to carry home, but that he has two men

on your bar-point to carry home, which lie in wait to catch your man, and that if you pass him you are to win the hit: suppose also that you have it in your choice to run the risk of being hit by seven or by eight, both of which are chances upon double dice. Which of these chances is it best for you to venture?

Ans. That of seven, for the following reasons; first, because the chances of being hit by seven or eight are equal. Secondly, if he does not hit seven, you will then have in your favour 23 chances to 13, that by your next throw you either hit or pass beyond him. Thirdly, in case your second throw should happen to be under seven, and that therefore you cannot hit him, yet you may play that cast at home, and, consequently, leave the blot upon double dice, Whereas, if, on the contrary, you had left the blot upon eight, you would have made a bad choice. First, because the chances of being hit by seven or by eight, are only equal. Secondly, because, if you should escape being hit by eight, yet you would then have but 17 chances in your favour against 19, for either hitting or passing beyond him by your next throw. Thirdly, in case your second throw should happen to be six-ace, which is short of him, you would then be obliged to play the man that is out of your table, not being able to play the six at home, and consequently to leave a blot to be hit by a single (or flat) die, which event, upon supposition that you play for eighteen shillings a game, would entitle him to eleven shillings of the whole stake depending.

THE LAWS OF BACKGAMMON.

1. If you take a man or men from any point, that man or men must be played.

2. You are not understood to have played any man, till it is placed upon a point, and quitted.

3. If you play with fourteen men only, there is no penalty attending it, because with a lesser number you play to a disadvantage, by not having the additional man to make up your tables.

4. If you bear any number of men before you have entered a man taken up, and which consequently, you were obliged to enter, such men, so born, must be entered again in your adversary's tables, as well as the man taken up.

5. If you have mistaken your throw, and played it, and your adversary have thrown, it is not in your or his choice to alter it, unless both parties agree.

BOSTON.

THIS game very much resembles Whist, and is somewhat like Quadrille. The players put eight fish each into a pool, and the dealer four extra. The cards are distributed as at Whist, except that the last is not to be turned up. During every deal, the player opposite the dealer should shuffle a pack to be cut by his right-hand neighbour, and turn up a card for the *first preference*; the suit of the same colour, whether red or black, is styled the *second preference*, and the other two are common suits. The player who misses deal does not lose his turn; but as a punishment is to put four more fish into the pool.

When the eldest-hand thinks he can get five or more tricks, he is to say *boston*; if otherwise, he says *pass*, unless he plays *misere*; that is, so as to lose every trick; *petit misere* is to put out a card

and lose every remaining trick ; *grand misere* is to lose them without putting one out ; *petit misere ouvert* is to put out a card, and lay the others down, and then lose all ; *grand misere ouvert* is the same without laying one out. When the eldest hand has *passed*, the second may proceed as the eldest ; or if the eldest have said *boston*, the second, or after him the third, and the dealer may also say *boston*, if he will engage to win five tricks, with either preference for the trump ; or the second, and other hands may say *petit* or *grand misere*, or undertake to get six or more tricks, the trump being any suit ; for these declarations will supersede that of *boston* simply, as appears by the table at page 240 ; where all are arranged according to the order in which they take place of each other. The highest, called *grand slam*, is undertaking to get thirteen tricks. By engaging to *do more*, the elder-hand may, as at Quadrille, supersede the younger. If all pass, the cards must be thrown up, and dealt by the person to the left of the former dealer, the new dealer putting four fish into the pool ; and the new eldest hand, unless he has previously passed, may also supersede the declaration of any other, or say *pass* ; and so on, till at length every person, except one has passed, and that person (if he have declared *boston*) is to name the trump, always in the choice of the player, and also (unless he has undertaken more than seven tricks) whether he shall choose a partner. In the last case, any person who engages to get the required number of tricks may answer *whist* ; the right of answering begins with the next eldest hand to him who has declared. The partner must undertake to get five tricks if the player undertake to get seven ; four if the player undertake to get six ; and three if he

undertake to get five, as in the table. When this is settled, the playing begins, as at Whist, except that the partners may be differently placed, and each is to take up his own tricks.

If the player obtain, or the player and partner jointly, the proposed number of tricks, or more, he or they are entitled to the fish in the pool called the *bets*; and besides, the number of tricks which they have won together, added to the number of honours they both held, is to be multiplied by the number in the table at page 240, over against the tricks they undertook, and under the name of the suit the trump was in; whether in the preference or common suits: the product must then be divided by 10, and the quotient shows the number of fish to be paid to each of the successful players, by the other two; or in the event of a *solo* to be paid him by each of the three others: should the product happen to be less than 10, one fish is to be paid nevertheless; if 15 or upwards, and under 20, it is to be considered as 20, and two fish to be paid; if 25 or upwards, and less than 30, as 30, and so on, *viz.*

Suppose the player and partner have undertaken five and three tricks, the trump in a common suit: they get eight, their proposed number; this if they have no honours, is to be multiplied by 1, (because in a common suit) the product is only 8, which cannot be divided by 10, but one fish is however paid to both player and partner by the other two. If they undertake five and three tricks, and get nine, the trump in second preference, and no honours, then 9, multiplied by 2, producing 18, is considered as 20, and divided by 10, making two fish to be paid to each of them. Should they undertake and win six and four tricks, the trump in a common suit, having two by honours; 2 and

10 are 12, which multiplied by 2, as stated in the table, make 24, that is two fish to be paid, the remainder not being taken notice of.

But if the player, or player and partner, do not get their tricks, then the number they are deficient, added both to what they undertook, and the honours they held, is to be multiplied by the number found in the table, and divided by 10, to shew the fish to be paid by them to their antagonists: for instance, when they undertake five and three tricks, having two by honours, the trump in a common suit, suppose they get only six tricks, then 6 subtracted from 8 leave 2, which added to 8 the number they undertook, and 2 the honours they held, make 12; this multiplied by 1, and divided by 10, gives one fish. If they undertake five and three tricks, having two by honours, the trump in second preference, should they get but 7, then 1 they are deficient, added to 8 they undertook, and 2 honours, make 11: this multiplied by 2, the number in the table, makes 22, which divided by 10, leaves 2, the fish to be paid. Should they undertake six and four tricks, having four honours, the trump in the first preference; suppose they get but eight tricks, 8 from 10, leave 2, which, added to the 10 they undertook, and 4 honours, form 16; that multiplied by 8, as in the table, make 128; then 130 divided by 10, gives 13 fish to be paid by them.

Should the player and partner each fail to get their proposed number of tricks, then the fish to be paid by them is to be defrayed in equal proportions between them; exactly the reverse of what would have been done had they been successful. But should one get his number of tricks and the other fail, then the unsuccessful person bears the whole of the loss, and when the player is alone,

he pays the allotted number of fish to each of his three opponents.

In all failures, whether the player has a partner or not, he or they pay a *beast* to the pools, equal to the number of fish they would have taken from it, had they proved successful; this is the invariable rule for assessing the beasts, which are not to be directly put into the pool, but laid aside, to be brought into the same at a future period, when some successful person has emptied it of the bets; and all succeeding beasts are to be kept separately, to supply the pool at the end of different deals, and till all are exhausted the game cannot end, unless, after any round is completed, they agree to share the beasts.

In respect to playing *misere*, when a person has any kind of hand that he thinks will enable him to lose all the tricks, the method is as follows: if he should think it requisite to get rid of any particular card, then the declaration must be only *petit misere*; if this be not superseded by the other players, he puts out a card without showing it, and the game commences, as at Whist, by the eldest hand; but in playing *misere* of any kind, there are no trumps. The parties (still endeavouring to lose their tricks) proceeds as at Whist, except that the general rules with regard to playing are reversed at *misere*.

Whenever the *misere* player is obliged to win a trick, the deal is at an end, and he is beasted, exactly as in playing boston; and moreover, is to pay to each of the other persons four fish, as appears in the table; on the contrary, if the twelve tricks are played without winning one of them, he is entitled to the contents of the pool, and also to four fish from each of his antagonists. After a similar manner, *grand misere* is played, with the

difference of not putting out a card, and having, of course, to lose thirteen tricks; which, if effected, entitles him to the pool, and eight fish from each of his adversaries; if otherwise, he must pay eight fish to each of them, and a beast to the pool, equal to what he would have taken out, had he gained his point. *Petit misere ouvert*, and *grand misere ouvert*, differ from the foregoing merely by laying down of the cards to be played on the table, so as to be seen by all parties (except the card put out, in the case of *petit misere ouvert*), and the playing is nearly the same; the only variation in the reckoning consists in paying or receiving sixteen or thirty-two fish, explained in the Boston table, at the end.

When the deal is concluded and settled according to the aforegiven directions, one or two persons will have won and taken the contents of the pool, or some on the contrary have been beasted. In the former case, all the parties must furnish the pool afresh, as at the beginning: but when either of the players is beasted, the new dealer has only to add four fish to the old pool, and so on till some one wins, who is entitled to the bets, and then the beast of greatest value (should there be more than one) is brought into the pool. The beasts may be of different value, because they are to be equal to the contents of the pool at the time of paying each of them, as already mentioned.

If there are several beasts, and the players wish to finish the game, it will be necessary to put two or more beast into the pool at once, or else the parties must share the fish on the table.

THE BOSTON TABLE.

	Tickets to be won by the		Reckoning for the Game.			Misere.
	Player.	Partner.	First Preference.	Second Preference.	Common Suits.	
Boston	5	3	4	2	1	
Petit Misere .....	...	...	...	...	...	4
	6	4	8	4	2	
	7	5	12	6	3	
Grand Misere .....	...	...	...	...	...
	8	;	16	8	4	
	9	;	20	10	5	
Petit Misere Ouvert..	...	...	...	...	...	16
	10	;	24	12	6	
	11	;	28	14	7	
Grand Misere Ouvert	...	...	...	...	...	32
	12	;	32	16	8	
Grand Slam	13	...	36	18	9	

BRAG.

BRAG, a game not near so much in vogue as formerly, is played with a whole pack of cards, and rather variously conducted by different parties, but the following is given as one of the most scientific methods. As many persons as the cards, leaving a few for stock, will supply, may play at a time, all of whom are to lay down three stakes a-piece, one for the best whist card turned up in the deal; the second for the best brag-hand, and the third for the eldest hand obtaining 31, or the next number under that. The dealer is to give

three cards at once to every player turning up, all round, the last card belonging to each player; and the best card, reckoning from ace downwards, amongst those so turned up, wins the first stake; if two or more superior cards of a sort be turned up, the eldest hand always, of course, has the preference, except in case of the ace of diamonds, which at this part of the game takes place of every other.

The second stake is won by the person possessing the best brag-hand, or often rather by the boldest bragger, who sometimes only pretends to hold good cards, such as pairs, flushes, sequences of flushes, and so on, similar to cribbage, excepting fifteens. In this state of the game there are usually two favourite cards; *viz.* the knave of clubs and the nine of diamonds, which are reckoned with any others to form pairs-royal or pairs; that is, the two favourites combined together with one, or either of them with two aces, kings, &c., are styled a pair-royal of such cards, or singly, either of the favourites with another card ranks as a pair: only natural pairs-royal are to precede artificial ones—as three aces, kings, &c., take place before a pair-royal, formed by assistance of the two favourites, though a natural pair does not supersede an artificial one made by help of a favourite, into which situation only the knave of clubs is admitted by some companies. The principal sport of the game is occasioned by any player *bragging* that he holds a better hand than the rest of the party, which is declared by saying, *I brag*, and staking a sum of money; if no one answer by a similar or larger deposit, then the bragger wins the second stake; but should any one reply, either by putting down the same, or a greater sum, and the first bragger decline the contest, the

answerer then takes both the money put down and the second stake; should the first bragger go on, he says *Again*, and ventures another sum, whether similar to that laid down by the opponent or not, is of no consequence, provided it is not smaller; and if the other should reply in like manner *Again*, the parties continue betting, each putting a sum not less than that last ventured by his adversary, till one or other of them, frightened, gives up the contest, by which the player holding out longest, gains all the money wagered, including the second stake; or either party may lay down a stake, saying, "*Let me see you;*" or, "*I'll see it;*" in which case both the hands are to be shown, and the strongest wins. When more than one person wishes to answer the first bragger, the eldest has the preference.

The third stake is obtained by the eldest player, who may hold, either from the cards dealt, or obtain by drawing in addition from the stock, thirty-one, or the highest number under that; each ace, king, queen, and knave being calculated as ten, and the rest according to their pips; any one drawing above thirty-one loses of course.

The player who is so fortunate as to gain all the three stakes in one deal, is, strictly speaking, entitled to three more from each of his antagonists, though in some companies this is declined, as savouring too much of gambling.

Brag is at present much patronized at the Oriental Club, in Hanover Square, but the game played is similar to what we have described.

A sweep before the end of the game, when any player can match all on the board, reckons 1 point.

In some deals at this game it may so happen, that neither party wins any thing, as the points are not set up according to the tricks, &c., obtained, but the smaller number is constantly subtracted from the larger both in cards and points, and if they both prove equal, the game commences again, and the deal goes on in rotation; when three persons play at this game, the two lowest add their points together and subtract from the highest; but when their two numbers together either amount to or exceed the highest, then neither party scores.

LAWs.

The deal and partners are determined by cutting, as at whist. The dealer gives four cards by one at a time, to every player, and either regularly as he deals, or by one, two, three, or four at a time, lays four, face upwards, on the board, and after the first cards are played, four others are to be dealt to each person till the pack is out; but it is only in the first deal that any cards are to be turned up.

The deal is not lost when a card is faced by the dealer, unless in the first round, before any of the four cards are turned up on the table; but should a card be faced in the pack before any of the said four are turned up, then the deal must be begun again.

Any person playing with less than four cards, must abide by the loss, and should a card be found under the table, the player whose number is deficient is take the same.

Each person plays one card at a time, with which he may not only take at once every card

of the same denomination on the table, but likewise all that will combine therewith : as, for instance, a ten takes not only every ten, but also nine and ace, eight and deuce, seven and three, six and four, or two fives ; and if he clear the board before the conclusion of the game, he scores a point : when a player cannot pair or combine, he is to put down a card.

The number of tricks are not to be examined or counted before all the cards are played, nor may any trick but that last won be looked at, as every mistake must be challenged immediately.

After the pack is dealt out, the player who obtains the last trick sweeps all the cards remaining unmatched on the table.

RULES.

The principal objects are to remember what has been played ; and when no pairs or combinations can be made, to clear the hand of court cards, which cannot be combined, and are only of service in pairing or in gaining the final sweep : but should no court cards be left, it is best to play any small ones, except aces, as thereby combinations are often prevented.

In making pairs and combinations, a preference should generally be given to spades, as obtaining a majority of them may save the game.

When three aces are out, take the first opportunity to play the fourth, as it then cannot pair ; but when there is another ace remaining, it is better even to play the little cassino, that can only make one point, than to risk the ace, which may be paired by the opponent, and make a difference of two points ; and if great cassino and an ace be on the board, prefer the ace, as it may be

paired or combined, but great cassino can only be paired.

Do not neglect sweeping the board when an opportunity offers ; always prefer taking up the card laid down by the opponent, and as many as possible with one card ; endeavour likewise to win the last cards or final sweep.

While great or little cassino is in, avoid playing either a ten or a deuce.

When you hold a pair, lay down one of them, unless when there is a similar card on the table, and the fourth not yet out.

Attend to the adversaries' score, and, if possible, prevent them from saving their lurch, even though you otherwise seemingly get less yourself, particularly if you can hinder them from clearing the board.

At the commencement of a game, combine all the cards possible, for that is more difficult than pairing ; but when combinations cannot be made, do not omit to pair, and also carefully avoid losing opportunities of making tricks.

CRIBBAGE.

CRIBBAGE, a game differing from all others by its immense variety of chances, and generally reckoned useful to instruct young people in the science of calculation, is played several ways, either by two, three, or four persons, with five, six, or sometimes eight cards : the rules also vary a little in different companies ; but the following are those most generally allowed.

The dealer may discover his own cards, though if he show any of the adversary's, the adversary is

entitled to mark two points, and is also at liberty to call a fresh deal.

Should too many cards be dealt to either party, the non-dealer may score two points, and likewise demand another deal, upon the error being detected previous to taking up the cards; but if he should not choose a new deal, the extra cards must be drawn: and when any player is observed to have in hand more than the proper number of cards, the opponent may set up four points, and also call a new deal.

If any player meddle with the cards after dealing, till the period of cutting them for the turn-up card, his opponent may score two points.

When any player scores more than he is entitled to, the other party may not only put him back as many points as are overmarked, but likewise score the same extra number for his own game.

Should either party meddle even with his own pegs unnecessarily, the opponent may take two points, and if any one take out his front peg, he must place the same back behind the other; though when any are misplaced by accident, a bystander is to replace the same according to the best of his judgment, but never otherwise interfere.

When any player miscalculates, or neglects to set up what he is entitled to, the adversary is, in some companies, allowed to take the points so omitted; but in others this is not done, the inattentive player being only prohibited from afterwards scoring them.

Each player may place his own cards, when done with, on the pack.

In five-card cribbage, the cards are to be dealt one by one alternately, but when played with six cards, it is customary to give three; and if with eight cards, four at a time.

The non-dealer at the commencement of the game in five-card cribbage scores 3 points, called taking *three for last*, but in six and eight-card cribbage this is not done.

Some parties permit flushes in play to be reckoned when three or more cards of a suit are laid down successively, that is, the person playing the third card reckons 3, and the player laying down a fourth of the same suit scores 4, and so on if five, six or more can be played.

MODE OF PLAYING FIVE-CARD CRIBBAGE.

Cribbage boards are so universally known, that it is unnecessary to describe them; and the 61 points or holes marked thereon make the game. The party cutting the lowest card deals, after which each player is first to lay out two of the five cards for the crib, which always belongs to the dealer; next the adversary cuts the remainder of the pack, and the dealer turns up and lays on the crib the uppermost card, for which, if a knave, he makes 2 points. The card turned up is to be reckoned by each party, both in showing their hands and in crib. After laying out and cutting as above mentioned, the eldest hand plays a card, which the other endeavours to pair, or to find one, the points of which reckoned with the first will make 15; then the non-dealer plays another card, trying to make a pair, pair-royal, sequence, flush where allowed, or 15, provided the cards already played have not exceeded that number, and so on alternately till the points of the cards played make 31, or the nearest possible number under that.

When the party whose turn it may be to play

cannot produce a card that will make 31, or come in under that number, he then says, *Go*, to his antagonist, who thereupon is entitled to score 1, and must play any card or cards he has that will come in; and if he can make exactly 31, then he is to take 2 points: the last player besides has often an opportunity of making pairs or sequences. Such cards as remain after this, are not to be played; but each party having, during the play, scored his points gained, in the manner as directed before, proceeds, the non-dealer first, then the dealer, to count and take for his hand and crib as follows, reckoning the cards every way they can possibly be varied, and always including the turned up-card.

For every 15..... 2 points.
 For a pair, or two of a sort 2 points.
 For a pair-royal, or three of a sort.. 6 points.
 For a double pair-royal, or four ditto, 12 points.
 For a sequence of any suits, according to the number.

For flushes, according to the number.

For a knave, or noddy, of the same suit as turned up, one point; but when turned up it is not to be reckoned again, nor is any thing to be taken for it when played.

N.B. Three cards of the same suit in hand, or four in crib, usually entitle the player to reckon that number as a flush, and also one more when the turn-up card happens to be of the same suit; but among professed gamesters it is not customary to allow flushes in crib, unless all the cards, including that turned up, are of the same suit.

In laying out cards for the crib, it is requisite, that every player should consider not only his own hand, but also to whom the crib belongs, as well as the state of the game; for what might be proper

in one situation would be highly imprudent in another. When any player possesses a pair-royal, it is generally adviseable to lay out the other cards for either crib, unless they consist of two fives, a deuce, and trois, five and six, seven and eight, a five and any tenth card, or the crib belonging to the adversary, or the game be almost finished. A player, when he does not thereby materially injure his hand, should, for his own crib, lay out close cards, in hopes of making a sequence, or two of a suit, in expectation of a flush, or of cards that of themselves amount to 15, or such as reckoned with others will make that number, unless the antagonist be nearly up, when it may be expedient to keep such cards as will probably prevent him from gaining at play. The direct contrary method should be pursued in respect of the adversary's crib, which each person should endeavour to baulk, by laying out those cards that are not likely to prove of advantage, unless at such a stage of the game, when it may be of consequence to keep in hand cards likely to tell in play, or when the non-dealer would either be out by his hand, or has reasons for judging the crib of little moment. A king is the best card to baulk a crib, as no card can form a sequence beyond it, except in some companies where queen, king, ace, are allowed as a sequence; and a king, or queen, with an ace, six, seven, eight, or nine, are good ones to put out. Low cards are generally the most likely to gain at play. Flushes, and sequences, particularly if they are also flushes, are for the most part eligible hands, as thereby the player is often enabled either to assist his own crib, or baulk that of the opponent; to whom a knave should never be given, if with propriety it can be retained. Sequences in play need not be laid down in order; it is sufficient that the cards

on the table will form a sequence without any other card intervening : as for instance, suppose a six first played, then a four, and afterwards a trois, should a deuce follow, it will make a sequence of three ; then, if a five, it will be a sequence of five ; and if an ace or seven succeed the five, a sequence of six ; though should a ten, or any other card that will not run on regular, be played as the fourth, the sequences then will be totally prevented.

Twenty-nine is the greatest possible number that can be gained by the show of any hand, or crib, either in five or six-card cribbage, and is composed of three fives and a knave, with a fourth five, of the same suit as the knave turned up ; this very seldom happens ; but twenty-four is not an uncommon number, and may be formed of four threes and a nine, or two fours, one five, and two sixes ; and of other combinations that a little experience will point out.

The almost endless variety in Cribbage renders it impossible to give, in a small compass, sufficient directions for learners to put out, retain, or play their cards to the best advantage in all the different situations of the game ; but experience and attention, combined with calculation, will soon do the whole. The chances are often so extraordinary and unexpected, that even between skilful gamesters it is possible at five-card cribbage, when the adversary is 56, for a lucky player, who had not previously made a single hole, to be more than up in two deals, his opponent getting no farther than 60 in that time ; and in four-hand cribbage a case may occur, wherein none of the parties hold a single point in hand, and yet the dealer and his friend, with the assistance of knave turned up, may make 61 by play in one deal, while their adversaries only get 24 ; and though these particular games, as

stated hereafter, may not happen in the course of many years, yet others nearly similar may now and then occur.

Suppose A to be 56, and B, whose turn it is to deal, not having gained a single point, to give to A one six, two sevens, a three, and a four, and to himself three sixes, a deuce and a three: suppose B to lay out the deuce and three; A the three and four to the crib, for which the turn-up card proves another three. A then plays a seven, B a six, making 13; then A another six, making 19, and scores 2 for a pair; B a third six, making 25, and a pair-royal, for which he scores	6
A not being able to come in, B plays the fourth six, making a double pair-royal, with 2 for 31.....	14
A shows and marks 2 for a pair of sevens in his hand; B shows and sets up 12 for his hand, and 17 for crib	29
<i>Second deal.</i> —A gives B three, four, and five of the same suit, with any two tenth cards; and to himself seven, eight, nine, and likewise two tenth cards; each person lays out his tenth cards for the crib, and a three is again turned up. B plays a four, A an eight, making 12, B a three, 15, and scores	2
A follows with the nine, making 24; B his five, 29, and the end hole	1
And scores also for his hand	13
<hr/>	<hr/>
Making in all (four more than game)	65

In the other case, A and B play against C and D. A deals to every one a three, four, six, seven, and any tenth card, which last-mentioned card, to play judi-

ciously, each should put out for the crib:		
then suppose a knave turned up, for which A and B score		2
C begins with a four.		2
B pairs the same, and sets up		2
D makes a pair-royal	6	
A the double pair-royal.....		12
C then follows with a three.		
B pairs that also		2
D makes another pair-royal	6	
A the double ditto, and end hole		13
C goes on with a seven, which		
B likewise pairs.....		2
D plays the third seven	6	
A the fourth seven, and end hole again		13
C now plays the six.		
B pairs it		2
D makes the pair-royal again.....	6	
A the double ditto, and end hole.....		13
	—	—
	24	61

For the method of playing four-hand Cribbage, see p. 256.

ODDS OF THE GAME.

The chances of points in a hand are calculated at more than 4, and under 5: and those to be gained in play are reckoned 2 to the dealer, and 1 to the adversary, making in all about 6 on the average throughout the game; and the probability of those in the crib are estimated at 5; so that each player ought to make 16 in two deals, and onward in the same proportion to the end of the game; by which it appears, that the first dealer has rather the advantage, supposing the cards to run equal, and the players to be equally

matched in skill. By attending to these calculations any player may judge whether he is at home or not, and thereby play his game accordingly, either by making a push when he is behind and holds good cards, or by endeavouring to baulk the opponent when his hand proves indifferent.

IN FAVOUR OF THE DEALER.

Each party being even at

5 holes going up, is	6 to 4
10 holes each	12 to 11
15 each	7 to 4
20 each	6 to 4
25 each	11 to 10
30 each	9 to 5
35 each	7 to 6
40 each	10 to 9
45 each	12 to 8
50 each	5 to 2
55 each	21 to 20
60 each	2 to 1

When the dealer wants 3 and his opponent 4, it is 5 to 4.

In all situations of the game, till within 15 of the end, when the dealer is 5 points a head, it is 3 to 1.

But when within 15 of the end, it is 8 to 1.

And if the dealer want 6, and the adversary 11, it is 10 to 1.

Should the dealer be 10 a head, it is 4 or 5 to 1.

And near the end of the game, 10 or 12 to 1.

When the dealer wants 16 and the antagonist 11, it is 21 to 20.

AGAINST THE DEALER.

Both players being even at

56 holes each, it is	7 to 5
57 each	7 to 4
58 each	3 to 2

If the dealer want 20, and his opponent 17, it is 5 to 4.

When the dealer is 5 points behind, previous to turning the top of the board, it is 6 to 5.

When he is 31 and the antagonist 36, it is 6 to 4.

When 36, and the adversary 41, it is 7 to 4.

EVEN BETTING.

When at 59 holes each player.

In all points of the game, till within 20 of the end, if the non-dealer be three a head.

The dealer wanting 14, and his antagonist 9

Ditto	11,	Ditto	7
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THREE OR FOUR-HAND CRIBBAGE differs only from the preceding, as the parties put out but one card each to the crib, and when 31, or as near as can be, have been made, then the next eldest hand leads, and the players go on again, in rotation, with any remaining cards, till all are played out before they proceed to show. For three-hand cribbage triangular boards are used.

A sort of three-hand cribbage is sometimes played, one person sitting out, not each game, but each deal, in rotation. In this the first dealer generally wins.

SIX-CARD CRIBBAGE varies from that played with five cards, as the players (always two only) commence on an equality, without scoring any points for last, retain four cards in hand, and all the cards are to be played out, as in three and four-hand cribbage with five cards. At this game it is of advantage to the last player to keep as close cards as possible, in hopes of coming in for 15, a sequence, or pair, besides the end hole, or 31. The first dealer is reckoned to have some trifling advantage, and each player may, on the average, expect to make 25 points in every two deals. The

first non-dealer is considered to have a preference, when he gains 10 or more the first hand, and the dealer not making more than his average number.

EIGHT-CARD CRIBBAGE is played, but it is very seldom.

These games of three and four-hand cribbage, and those of six or eight-cards, are easier than that of five cards by two persons, and consequently are not near so much in vogue with professed gamesters.

Some ingenious people in London invented a game of chance they styled playing at cribbage by hackney coaches ; that is, two persons seating themselves at a window in some great thoroughfare street, one was to take all the coaches from the right, the other from the left ; the figures on the doors of the carriages were reckoned as cards in show, and every man or boy that happened to sit, stand, or hold at the back of any of them, was called a Noddy, and 1 scored for each.

DOMINO.

DOMINO is played by two or four persons with twenty-eight pieces of oblong ivory, plain at the back, but on the face divided by a black line in the middle, and indented with spots from one to a double-six : which pieces are, a double-blank ; ace-blank ; double-ace ; deuce-blank ; deuce-ace ; double-deuce ; trois-blank ; trois-ace ; trois-deuce ; double-trois ; four-blank ; four-ace ; four-deuce ; four-trois ; double-four ; five-blank ; five-ace ; five-deuce ; five-trois ; five-four ; double-five ; six-blank ; six-ace ; six-deuce ; six-trois ; six-four ;

six-five; and double-six. Sometimes a double set is played with, of which double-twelve is the highest.

At the commencement of the game, the cards (as they are called) are shuffled with their faces on the table. Each person draws one, and if four play, those who choose the two highest are partners against those who take the two lowest: drawing the latter also serves to determine who is to lay down the first piece, which is reckoned a great advantage. Afterwards, each player takes seven pieces at random. The eldest hand having laid down one, the next must pair him at either end of the piece he may choose, according to the number of pips, or being a blank in the compartment of the piece; but whenever any one cannot match the part not paired, either of the card last put down, or of that unpaired at the other end of the row, then he says *Go*; and the next is at liberty to play. Thus they play alternately, either till one party has wholly discarded, and thereby wins the game, or till the game is *blocked*; that is, when neither party can play by matching the pieces where unpaired at either end; then they win who have the smallest number of pips on the pieces remaining in their possession. It is to the advantage of every player to dispossess himself as early as possible of the heavy pieces, such as double-sixes, fives, fours, &c.

Sometimes, when two persons play, they take each only seven pieces, and agree to *play* or *draw*; i. e. when one cannot come in, or pair with the pieces on the board at the end unmatched, he is to draw from the fourteen pieces in stock, till he finds one to suit.

This game requires strict attention, and nothing but practice will make perfect.

POPE, OR POPE JOAN.

POPE, a game somewhat similar to that of Matrimony, already stated at page 79, is played by a numerous party, who generally use a board painted for the purpose, which may be purchased at most turners or toy-shops.

The eight of diamonds must first be taken from the pack, and after settling the deal, shuffling, &c. the dealer dresses the board by putting fish, counters, or other stakes, one each to ace, king, queen, knave, and game, two to matrimony, two to intrigue, and six to the nine of diamonds, styled pope. This dressing is in some companies at the individual expense of the dealer, though in others the players contribute two stakes a-piece towards it. The cards are next to be dealt round equally to every player, one turned up for trump, and about six or eight left in the stock to form stops : as for example, if the ten of spades be turned up, the nine consequently becomes a stop ; the four kings and the seven of diamonds are always fixed stops, and the dealer is the only person permitted in the course of the game to refer occasionally to the stock for information what other cards are stops in the deal. If the trump turned up should be an ace, a king, a queen, or a knave, the dealer takes whatever is deposited on such card in the board ; but when pope is turned up, he is entitled both to that and the game, besides a stake for every card dealt to each player. Unless the game be thus determined by pope being turned up, the eldest hand begins by playing out as many cards as possible ; first the stops, then pope, if he have it, and afterwards the lowest card of his longest suit, particularly an ace, for that never

can be led to ; the other players are to follow in sequence of the same suit, if they can, till a stop occurs, when the party having the stop thereby becomes eldest hand, and is to lead accordingly, and the play goes on, until some one has parted with all his cards, by which he wins the game, and becomes entitled besides to a stake for every card not played by the others, the person excepted who may hold pope, which excuses him from paying ; but if pope have been played, then the party having held it is not excused. King and queen form what is denominated matrimony, and queen and knave intrigue, when in the same hand ; but neither they, nor ace, king, queen, knave, or pope, entitle the holder to the stakes deposited thereon, unless played out, and no claim can be allowed after the board is dressed for the succeeding deal : in all such cases the stakes are to remain for future determination,

This game only requires a little attention, to recollect what stops have been made in the course of it ; as for instance, if a player begin by laying down the eight of clubs, then the seven in another hand forms a stop, whenever that suit is led from any lower card, or the holder, when eldest, may safely lay it down in order to clear his hand.

PUT.

PUT, played with a complete pack, generally by two people, sometimes by three, and often by four, is a game at which the cards rank differently from all others, trois being the best, next the deuce, then ace, king, and so on in the usual order, as at whist. After cutting for deal, &c., at

which the highest put-card wins, three cards, by one at a time, are given to each player: then the game is played in the following way. If the non-dealer throw up his cards he loses a point; if he play, and the dealer do not lay down another to it, he gains a point; but should the dealer either win the same, pass it, or lay down one of equal value, forming what is styled a tie, the non-dealer is still at liberty to put; that is, play or not, and his opponent then only gains a point; then if both parties agree to go on, whoever gains all the tricks, or two out of three, wins five points, which are the game; if each player win one trick, and the third be a tie, then neither party scores.

Four-handed put differs only in this—that, on both sides, one of the players gives his best card to his partner, who lays out one in lieu of it, and the game is afterwards played as in two-handed put.

If the dealer turn up any of his adversary's cards in dealing, another deal may be demanded; but if he turn up his own he is to abide by it. Should a faced card occur, the pack must be shuffled and dealt again. When more cards than necessary are given to the non-dealer, he may either claim a fresh deal, or have the extra cards drawn; but should the dealer give himself too many, then his opponent is entitled to a point, and may either have another deal, or draw the supernumerary cards. By-standers ought never to interfere, under penalty of paying the stakes. Either party saying *I put*, must abide the event of the game, or pay the stakes.

QUADRILLE.

GAMING, like every thing else in this sublunary world, is subject to the caprices and vicissitudes of fashion. Thus Quadrille, which for upwards of a century held the first rank in all the gambling circles of Europe, is now completely banished from them ; and is rarely or ever seen beyond the precincts of some antiquated provincial circles, where it continues still to *faire les delices* of many a dowager. It is played by four persons, with forty cards ; the four tens, nines, and eights, are discarded from the pack ; the deal is made by distributing the cards to each player, three at a time, for two rounds, and once four to each, beginning with the right-hand player, who is the elder-hand.

The stakes, consisting of several equal billets or contracts, comprising the counters and fish, are distributed among the players, who agree upon the value thereof, and upon the number of tours, which are usually ten. After the trump is named, the right-hand player leads, and should the ombre, either alone or with a friend, win all the tricks, he gains the vote, or if six tricks, the game ; but if he get only five tricks he loses by remise, and if only four, by codil. The game, consolation, matadores, bastos, and other payments, are variously regulated, according as the game is won or lost. The holder of either or both of the red aces is entitled to a fish for each.

SOME SHORT RULES FOR LEARNERS.

1. *When you are the ombre*, and your friend leads from a mat, play your best trump, and then lead the next best the first opportunity.
2. If you possess all the trumps, keep leading them, except you have other certain winning cards.
3. If all the mats should not be revealed by the time you have won six tricks, do not risk playing for the vole.
4. *When you are the friend called*, and hold only a mat, lead it, but if only a mat guarded by a small trump, lead the small one; though when the ombre is last player, lead the best trump you have.
5. Punto in red, or king of trumps in black, are good cards to lead when they are your best, and should either of them succeed, then play a small trump.
6. When the ombre leads to discover the friend, if you hold king, queen, and knave, put on the knave.
7. Preserve the called suit, whether friend or foe.
8. *When playing against a lone hand*, never lead a king, unless you have the queen, nor change the suit, nor permit, if possible to prevent it, the ombre to be last player.
9. Call on the strongest suits, except you have a queen guarded; and, if elder-hand, you have a better chance than when middle-hand.
10. A good player may succeed better with a weaker hand when either elder or younger, than if middle hand.

THE RANK OF THE CARDS WHEN NOT TRUMPS.

Clubs and Spades.	Hearts and Diamonds.
King,	King,
Queen,	Queen,
Knave,	Knave,
Seven,	Ace,
Six,	Deuce,
Five,	Three,
Four,	Four,
Three,	Five,
Deuce.	Six,
—	Seven.
In all 9.	—
	In all 10.

THE RANK AND ORDER OF THE TRUMPS.

Clubs and Spades.	Hearts and Diamonds.
<i>Spadille, the ace of spades.</i>	<i>Spadille, the ace of spades.</i>
<i>Manille, the deuce of spades or of clubs.</i>	<i>Manille, the seven of hearts or of diamonds.</i>
<i>Basto, the ace of clubs.</i>	<i>Basto, the ace of clubs.</i>
King,	King,
Queen,	Queen,
Knave,	Knave,
Seven,	Deuce,
Six,	Three,
Five,	Four,
Four,	Five,
Three.	Six.
—	—
In all 11.	In all 12.

N.B. Spadille and Basto are always trumps, by which the red suits have one trump more than the black.

There are three matadores, *viz.* spadille, manille, and basto, which force all inferior trumps ; but if an ordinary trump be led, you are not obliged to play a matadore ; though if spadille be led, and you hold manille or basto unguarded, you must play it ; also, if manille be led, and you have basto unguarded, that must be played.

1. The first thing, after seeing the cards, is to ask leave ; to pass : or play *sans prendre* ; and if you name a wrong trump, you must abide by it.

2. If all the players pass, he who holds spadille is obliged to play what is called forced spadille ; but though he should not make three tricks, he is not beasted.

3. The player, who calls a king, ought to have a fair probability of winning three tricks, to prevent being beasted.

4. Therefore, such games only are set down as give a fair chance to win by calling a king, with directions at the end of each what to lead.

CALCULATIONS NECESSARY FOR THOSE WHO HAVE MADE SOME PROGRESS IN THE GAME.

1. What are the odds that my partner holds one of any two cards ?

Ans. That he holds one card out of any two certain cards, is about 5 to 4 in his favour ; and if you hold one matadore, the odds are in your favour that your partner holds one of the other two, and consequently you may play your game accordingly.

Again, suppose you call a king, having a knave and one small card of another suit in your hand, it is 5 to 4 in your favour that your partner holds either the king or queen of that suit ; and conse-

quently the odds are in your favour, than you win a trick in the same.

2. What are the odds that my partner holds one out of any three certain cards?

Ans. That he holds one out of any three certain cards, is about 5 to 2 in his favour: and though you have no matadore, with the assistance of one in your partner's hand, the odds are great that you win the game. Observe, that it is about 5 to 2 that your partner holds one of them, you having none.

This calculation may be applied to many other cases.

GAMES IN RED, CALLING A KING.

1. Spadille, manille, two small hearts or diamonds, the queen of clubs, and one small one, and four small cards of the other suits. Lead a small trump.

2. Spadille, manille, two small hearts or diamonds, with the knave and two small clubs, and three small cards of the other suits. Lead a small trump.

3. Spadille, manille, two small hearts or diamonds, three small clubs, and three small cards of the other suits. Lead a small trump.

4. Spadille, punto, king, queen, and one small heart or diamond; three small clubs, the queen and one spade. Lead punto.

5. Spadille, punto, king, knave, and one small heart or diamond, the knave and two small clubs, and two small spades. Lead punto.

6. Spadille, king, queen, knave, and one small heart or diamond, with the queen, knave, and one small club, and two small spades. Lead the king of trumps.

7. Spadille, three, four, five, and six of hearts or diamonds, king of clubs and one more, queen and two small spades; when you have the lead play a small trump; in the second lead play spadille.

8. Manille, basto, punto, and two small hearts or diamonds, three small clubs, and the knave and one spade. Lead manille.

9. N.B. Manille, basto, king and two small hearts or diamonds, queen and one small club, and three small spades. Lead manille.

10. N.B. Manille, basto, queen, and two small hearts or diamonds, queen and two small clubs, knave and one spade. Lead manille.

11. Manille, basto, with the three smallest hearts or diamonds, queen and one small club, knave and two small spades. Play a small trump.

12. N.B. Manille, punto, king, and two small hearts or diamonds, queen, knave, and one small club, king, and one small spade. Lead manille.

13. Manille, punto, queen, and two small hearts or diamonds, queen and one small club, king and two small spades. Play a small trump.

14. Manille, punto, and three small hearts or diamonds, knave and one small club, king, queen, and one small spade. Play a small trump.

15. Manille, and the four smallest hearts or diamonds, queen and one small club, king, queen, and one small spade. Play a small trump.

16. N.B. Basto, punto, king, and two small hearts or diamonds, king and queen of clubs, queen and two small spades. Lead basto.

17. N.B. Basto, punto, queen and two small hearts or diamonds, queen, knave, and one small club, king and queen of spades. Lead basto.

18. N.B. Basto, punto, and three of the smallest hearts or diamonds, king and queen of clubs,

queen, knave, and one small spade. Play a small trump.

19. Basto, and the four smallest hearts or diamonds, king and queen of clubs, queen, knave, and one small spade. Play a small trump.

20. N.B. Punto, king, queen, and two small hearts or diamonds, king and queen of clubs, queen, knave, and one small spade. Lead punto.

21. Punto, king, and three small hearts or diamonds, king and queen of clubs, queen, knave, and one small spade. Play a small trump.

GAMES IN BLACK, CALLING A KING.

1. Spadille, manille, and two small clubs or spades, the knave and two small hearts, and three small diamonds. Lead a small trump.

2. N. B. Spadille, manille, and two small clubs, or spades, queen, and two small hearts, and three small diamonds. Lead a small trump.

3. Spadille, manille, and two small clubs or spades, three small hearts, three small diamonds. Lead a small trump.

4. N. B. Spadille, king, queen, and two small clubs or spades, with the queen and one small heart, three small diamonds. Lead the king of trumps.

5. Spadille, king, knave, and two small clubs, queen, and two diamonds, two small hearts. Play a small trump.

6. Spadille, queen, and three small clubs, or spades, queen, and two small hearts, two small diamonds. Play a small trump.

7. Spadille, and the four smallest clubs, or spades, king, and one small heart, queen, and two small diamonds. Play a small trump.

8. Manille, basto, king, and two small clubs or spades, three small hearts, and two small diamonds. Lead manille.

9. Manille, basto, queen, and two small clubs or spades, three small hearts, queen, and one small diamond. Lead manille.

10. Manille, basto, knave, and two small clubs or spades, knave, and one heart, three small diamonds. Lead manille.

11. Manille, basto, and three small clubs or spades, queen, and two small hearts, knave, and one small diamond. Lead manille.

12. N. B. Manille, king, queen, and two small clubs or spades, king, and one small heart, queen, knave, and one small diamond. Lead manille.

13. N. B. Manille, king, knave, and two small clubs or spades, king, and one small heart, queen, and two small diamonds. Lead manille.

14. Manille, king, and three small clubs or spades, queen, and two small hearts, king, and one small diamond. Play a small trump.

15. Manille, and the four smallest clubs or spades, king, queen, and one small heart, two small diamonds. Play a small trump.

16. N. B. Basto, king, queen, and two small clubs or spades, queen, and two small hearts, king, and one small diamond. Lead basto.

17. N. B. Basto, king, knave, and two small clubs or spades, knave and one heart, king and two small diamonds. Lead basto.

18. N. B. Basto, king, and three small clubs or spades, king and queen of hearts, queen and two small diamonds. Play a small trump.

19. Basto and four of the smallest clubs or spades, king and queen of hearts, queen, knave and one small diamond. Play a small trump.

20. N. B. King, queen, knave, and two small

clubs or spades. king and queen of hearts, knave and two small diamonds. Lead the king of trumps.

21. King, queen, seven, six, and five of clubs or spades, king and queen of hearts, queen, knave, and one small diamond. Lead the king of trumps.

The cases, both in red and black, marked thus (N. B.) are very good games to play, and you have the odds on your side to win those which are not marked.

N. B. Call to your strongest suit, except you have a queen guarded ; and if elder hand, you will have a fairer chance to win the game than if middle, because leading a trump frequently makes your adversaries play against each other.

THE ODDS OF WINNING THE FOLLOWING GAMES,
SANS PRENDRE ; AND ALSO SUCH AS OUGHT NOT
TO BE PLAYED SANS PRENDRE.

Games in Black, Elder-Hand, and leading Trumps.

1. Three matadores in clubs, king and six of diamonds, king and six of hearts, king, five, and six of spades. That this game wins is 27 to 4.

2. Three matadores, and the three of clubs, king and six of diamonds, king and six of hearts, two small spades. That it wins is 215 to 162, or about 4 to 3.

3. Three matadores, three and four of clubs, king and six of diamonds, three small hearts. That it wins is 291 to 86, or above 10 to 3.

4. Three matadores, with three, four, and five of clubs, two small diamonds, and two small hearts. That it wins is near 10 to 1.

5. Spadille, manille, king, knave, three and four

of clubs, two small diamonds, two small hearts. That it wins is 4895 to 3022, or about 8 to 5.

6. Spadille, manille, king, three, four, and five of clubs, two small diamonds, and two small hearts. That it wins is about 8 to 5.

7. Spadille, manille, king, three and four of clubs, king and six of diamonds, and three small hearts. That it loses is 1514 to 1125, or about 4 to 3.

8. Spadille, manille, three, four, five, and six of clubs, two small diamonds, and two small hearts. That it loses is 1514 to 1125, or about 4 to 3.

9. Spadille, manille, three, four, and five of clubs, king, and one small diamond, and three small hearts. That it loses is 2234 to 405, or about 11 to 2.

10. Three false matadores, and three of clubs, king and six of diamonds, king and six of hearts, king and six of spades. That it wins is 215 to 162, or about 4 to 3.

11. Three false matadores, three and four of clubs, king and six of diamonds, and king, six, and five of hearts. That it wins is 291 to 86, or above 10 to 3.

12. Three false matadores, three, four, and five of clubs, king and six of diamonds, and two small hearts. That it wins is 1025 to 106, or near 10 to 1.

13. Manille, basto, queen, three, four, and five of clubs, king and one small diamond, and two small hearts. That it wins is 4895 to 3022, or above 8 to 5.

14. Manille, basto, knave, three, four, and five of clubs, king and one small diamond, and two small hearts. That it loses is 4162 to 3755, or almost 10 to 9.

15. Spadille, three, four, five, and six of clubs,

king and one small diamond, king of spades, king and one small heart. Lead a small trump, and the chance is 1749 to 890, or near 2 to 1.

16. Spadille, three, four, five, six, and seven of clubs, king and one diamond, king of spades, and king of hearts. That it wins is about 275 to 2.

17. Manille, king, queen, two small spades, or clubs, king, and a small heart, queen, knave, and one small diamond.

18. Manille, king, knave, two small spades, or clubs, king and a small heart, queen and two small diamonds.

19. Basto, king, queen, two small spades or clubs, queen and two small hearts, king and a small diamond.

20. Basto, king, knave, two small clubs or spades, king and queen of diamonds, queen, and two small hearts.

Games in Red, Elder-Hand, and leading Trumps.

1. THREE matadores in hearts, king and one diamond, king and one spade, king and two clubs. That it wins is 24 to 11, or about 2 to 1.

2. Three matadores, and the three of hearts, king and one small diamond, king and queen of clubs, and two small spades. That it wins is 7010 to 1661, above 4 to 1; beside the chance that the kings and queen pass, though the player should not fetch out all the trumps.

3. Three matadores, and three and four of hearts, king and one small club, and three diamonds. That it wins is almost 4 to 3.

4. Three matadores, three, four, and five of hearts, two small diamonds, and two small clubs. That it wins is 291 to 86, or above 10 to 3.

5. Spadille, manille, punto, queen, three, and four of hearts, two small diamonds, and two small

clubs. That it loses is 1706 to 1339, or above 5 to 4.

6. Spadille, manille, punto, three, four, and five of hearts, two small diamonds, and two small clubs. That it loses is 1514 to 1125, or above 4 to 3.

7. Spadille, manille, king, three, four, and five of hearts, two small diamonds, and two small clubs. That it loses is 278 to 99, or about 14 to 5.

8. Spadille, manille, three, four, five, and six of hearts, two small diamonds, and two small clubs. That it loses is above 3 to 1.

9. Spadille, manille, three, four, five, and six of hearts, king and one club, and two small diamonds. That it wins is 1845 to 794, or above 9 to 4.

10. Spadille, manille, deuce, three, four, five, and six of hearts, two small diamonds, and one small club. That it wins is above 9 to 1, nearer 10 to 1.

11. Four matadores and hearts, king and two small clubs, king and two small spades. That it wins is about 16 to 1. That the player fetches out the trump is 7206 to 1465, near 5 to 1; besides the chance that the kings pass, though the trump should not fall.

12. Three false matadores, and three of hearts, king and one small club, king and one diamond, and king and one small spade. That it loses is 5791 to 2880, or above 2 to 1.

13. Three false matadores, three and four of hearts, king and one club, and king and two spades. That it wins is 215 to 162, or about 4 to 3.

14. Three false matadores, three, four, and five of hearts, king and one small club, and two small spades. That it wins is 291 to 86, or above 10 to 3.

15. Three false matadores, with the knave, three,

four, and five of hearts, one small diamond, and two small spades. That it wins is 1025 to 106, near 10 to 1; provided the lead comes into your hand a second time without trumping with a matadore.

16. Three false matadores, with the queen, three, four, and five of hearts, one small diamond, and two small clubs. (The same.)

17. Manille, basto, king, three, four, and five of hearts, king and one diamond, and two small clubs. That it loses is 1514 to 1125, or about 4 to 3.

18. Manille, basto, queen, three, four and five of hearts, king, and one club, and two small spades. That it loses is 278 to 99, or near 3 to 1.

19. Manille, basto, three, four, five, and six of hearts, king, and one diamond, and two small clubs. That it loses is 2639 to 495, or about 6 to 1.

20. Spadille, deuce, three, four, five, and six of hearts, king and one diamond, and the king of spades and of clubs. That spadille fetches out three trumps is above 4 to 1, and consequently above 4 to 1 for winning.

21. Spadille, three, four, five, and six of hearts, king and one diamond, king and one spade, and the king of clubs. That three sure tricks in trumps lie against the player, is 1384 to 1255, and consequently the odds are against him. He should lead a small trump; for if he play spadille, he has no chance. At his second lead he ought to play spadille.

22. Three matadores, three, four, and five of diamonds, two small hearts, and two small spades or clubs.

23. Manille, basto, punto, three and four of diamonds or hearts, king and one spade, and king and two clubs.

24. Manille, basto, punto, knave, three, four and five of diamonds, a small heart, and two small clubs or spades.

25. Manille, basto, punto, queen, three, four, and five of diamonds, a small heart, and two small clubs or spades.

In all the games of false matadores, it is supposed the player is not over-ruffed or trumped before the lead comes again into his hand.

N.B. If it should be 5 to 4 for winning a *sans prendre* game, consider that calling a king makes a sure game, besides the chance of a *vole*; and therefore, upon a strict calculation, it is more advisable to call a king.

THE LAWS OF THE GAME OF QUADRILLE.

1. The cards are to be dealt to the right hand, by fours and threes, and no otherwise; and the dealer is at liberty to begin by four or by three; if in dealing there should be one or more faced cards, there must be a new deal, unless it be the last card.

2. Should there be too many or two few cards in the pack, there must be a new deal.

3. He who deals wrong is to deal again.

4. He who has asked leave is obliged to play.

5. No one is boasted for playing out of turn; but the card played may be called at any time in that deal, provided it does not cause a renounce; or either of the adversaries may demand the partner of him who played out of his turn, or his own partner, to play any suit he thinks fit.

6. The three matadores cannot be forced by an inferior trump; but the superior, if led, forces the inferior.

7. A player naming any suit for trumps, must abide by the same.
8. Whosoever plays with eleven cards is beasted.
9. If you play *sans prendre*, or have matadores, your claim must be made before the next deal is finished, or you lose the benefit.
10. Any person naming his trump without asking leave, is obliged to play *sans prendre*, unless he is the younger hand, and all the rest have passed.
11. After the game is won, if the person who won the sixth trick play the seventh card, he is obliged to play for the *vole*.
12. If you have four kings dealt, you are at liberty either to call a queen to one of your kings, except the queen of trumps; or to call one of your own kings.
13. If any person separate a card from the rest, he ought to play it, should the adverse party have seen it, unless he plays *sans prendre*.
14. Should the king be called, or his partner play out of turn, the *vole* is not to be played for.
15. No person is to be beasted for a renounce, unless the trick is turned and quitted; and if any renounce be timely discovered, should the player happen to be beasted by such renounce, all the parties are to take up their cards, and play them over again.
16. Forced spadille is not obliged to make three tricks, nor is he allowed to play for the *vole*.
17. Whoever undertakes to play the *vole*, has the preference of playing before him who offers to play *sans prendre* only.
18. If all parties agree to it, let the person have the preference of playing who plays for the most tricks, which will prevent small games.
19. The ombre is entitled to know his king called, before he declares for the *vole*.

20. When six tricks are won, he who won the sixth ought to say, "I play the *vole*;" or, "I do not play the *vole*;" or, "I ask;" and nothing else.

21. He who wins the *vole*, is to take double the stake played for out of the pool.

22. He who asks leave, if elder hand, may play *sans prendre*, in preference to any of the other players.

23. A player who has one or more kings, may call him or herself, naming the king, but must win six tricks.

24. If you play the king surrendered, he must win six tricks who demands the king of any person.

25. He who has passed once has no right to call afterwards; also he who has asked is obliged to play, unless somebody else plays *sans prendre*.

26. Should the ombre, or his friend, show their cards before they have won six tricks, the adversaries may call their cards as they please.

27. Whoever has asked leave only cannot play *sans prendre*, unless forced.

28. You are at liberty to look at all the tricks turned when you are to lead, but not otherwise.

29. Whoever undertakes playing for the *vole*, and does not succeed, has a right to the stakes *sans prendre*, and matadores should he have them, having won his game.

30. Any person discovering his game is not entitled to play for the *vole*.

31. If there happen to be two cards of the same sort, and it be found out before the deal is ended, the deal is void, but not otherwise.

32. Nobody is to declare how many trumps are played out.

33. He who calls and does not make three

tricks, is to be boasted alone, unless in forced spadille.

A DICTIONARY OF QUADRILLE.

ALONE. See *Sans Appeller*, and *Sans Prendre*.

TO ASK LEAVE is to ask permission to play with a partner by calling a king.

BASTO, the ace of clubs, is always the third trump.

BEAST is a penalty, which consists in paying as many counters as are down on the board; and is incurred either by renouncing, or by not winning, when you stand the game, which is called being boasted. Beast off the board, is when those who stand the game do not gain more than four tricks.

CHEVILLE is to be situated between the eldest hand and the dealer.

CODILL is when those who defend the pool, make more tricks than they who stand the game; the former are said to win codill, and the latter to lose it.

CONSOLATION is a claim always paid by losers to those who win, whether by codill or remise.

DEVOLE is when he who stands the game does not gain a trick.

DO MORE is when any player, having asked leave, is required by a younger hand either to pass or play alone.

DOUBLE. To play double, is to pay the game and the stake double, as well as the consolation, the *sans prendre*, the matadores and the devole.

FORCE. The ombre is forced when a strong trump is played to weaken his hand, should he overtrump; and he is likewise said to be forced when, upon asking leave, another, by offering to

play *sans prendre*, compels him to play alone or pass.

FRIEND is the player who has the king or queen called.

GAME. To stand the game signifies either to call or play alone.

IMPASSE is playing, when in cheville, the knave of a suit of which you have the king.

KING SURRENDERED. See *Roi Rendu*.

MANILLE is always the second trump ; in black, the deuce of spades, or clubs ; and, in red, the seven of hearts or diamonds.

MARK means the fish put down by the dealer.

MATADORES or MATS mean spadille, manille, and basto, the three first trumps. *False matadores* are any sequence of trumps following the matadores regularly.

MILLE is an ivory mark, standing for ten fish.

OMBRE is the name given to him who stands the game, either by calling or by playing *alone*, *sans appeller*, or *sans prendre*.

PARTY signifies the duration of the game, according to the number of tours agreed upon.

PASS is the term that is used when you have not a good hand to play.

PONTO or PUNTO is the ace of diamonds, when diamonds are trumps ; or of hearts, when hearts are trumps ; and is then the fourth trump.

POOL. The pool consists of the fishes deposited for the deals, or the counters which are put down by the players, or the beasts that go on the game. To defend the pool, is to be against those who stand the game.

PRISE is the number of fish or counters given to each player at the beginning of the party.

REGLE is the order that is observed at the

game ; it is called, being in regle, when the ombre trumps the return of the king called.

REMISE is when they who stand the game do not make more tricks than they who defend the pool ; and they then lose by remise.

RENOUNCE is not to follow the suit led, when you have it ; it is also called a renounce when, not having any of the suit led, you win with a card that is the only one you have of that suit.

REPRISE, the same as *Party*.

REPORTE, the same as *Remise*.

ROI RENDU, the king surrendered, is the method of playing, when the king called is exchanged with the ombre, for which a fish is paid and some other card given by him who called, and he is to win the game alone.

SPADILLE is the ace of spades, always the first trump. *Forced Spadille* is when he who has spadille is obliged to play, all the other players having passed.

SANS APPELLER means without calling, and is when you play without calling a king.

SANS PRENDRE. This term signifies the same as *sans appeller*. *Forced sans prendre* is, when, having asked leave, one of the other players offers to play *sans prendre* ; in which case you are obliged either to play *sans prendre*, or to pass.

TENACE is to wait with two trumps, that must necessarily win when he that has two others is obliged to lead ; such are the two black aces, with regard to manille and punto.

TOURS are counters put down by the winners to mark the number of games played.

VOLE means gaining all the tricks, either with a friend or alone.

VARIATIONS OF THE GAME AT QUADRILLE.

In order to vary this game, some introduce the *mediateur*, either with or without the *favourite* suit; the first term signifies a king, which any person may demand, in order to play *sans prendre*, giving in return some other card, and a fish: but if the king be of the favourite suit, then two fish are to be paid. The favourite suit is determined either by drawing a card, or otherwise fixing upon a suit at the commencement of the party; and during the whole game, each player, asking leave in that suit, has a preference before others who have a good hand in a different suit, unless a *mediateur* is demanded, then that takes the lead: and if in the favourite suit, then that again is first; those who play alone, without the *mediateur*, precede even that, and, when in the favourite, take place of all.

Solitaire quadrille is where it is agreed not to call, but always play *sans prendre*, with or without the *mediateur*; and if in any deal no one can play alone, then the cards are to be dealt again, and such additions made to the stake as may have been settled.

Solitaire quadrille by three, or tredrille, is, excepting the king, throwing out all of one red suit, and the six of the other; each person playing on his own account, as at three-handed whist.

In Lancashire, where this game is very much in vogue, it is customary to play with a purchased king, and preferable suit (always hearts), in a manner similar to what is styled above the *mediateur* and *favourite-suit*, as may be fully perceived by the following table of

REWARDS AT PREFERENCE.

1. An Ask-leave in a common suit: the same as at plain quadrille; *viz.* one a-piece.

2. An Ask-leave in hearts: double from the pool, that is two a-piece besides the aces; if matadores, two a-piece from the adversaries; double mats, four a-piece.

3. A purchase-king in a common suit: one from each antagonist; mats, two; double mats, three.

4. A purchase in hearts: two from each; mats, four; double mats, six.

N.B. Pay two for the purchased-king, when the suit is in hearts.

5. A solo, common suit: two from each; mats, three; double mats, four.

6. A solo in hearts: four from each; mats, six; double mats, eight.

7. A vole, common suit, with a friend; the game and five a-piece out of the pool; and from the adversaries two a-piece; if mats, three; double mats, four.

8. A vole in hearts; the game and ten each out of the pool; four a-piece from the adversaries; with mats, six; double mats, eight.

9. A purchase-vole, common suit: the game and ten out of the pool; three from each adversary; mats, four, double mats, five.

10. A purchase-vole in hearts; the game and twenty out of the pool: six a-piece from the opponents; mats, eight; double mats, ten.

11. A solo-vole, common suit: the game and twenty out of the pool, six from each antagonist: mats, seven; double mats, eight.

12. A solo-vole in hearts: the game and forty

out of the pool: twelve from each adversary; mats, fourteen; double mats, sixteen.

13. A beast in hearts: pay two a-piece to the board, and put four more out of the pool: if the next game be in hearts, take double out of the pool, but if in a common suit, only what lies upon the table, excepting the aces: always pay double to a beast if it be an eight board, and when beasted with a friend called, pay eight a-piece, making the next a sixteen board; should another beast succeed, pay thirty-two, and the next sixty-four.

N. B. In common suits never take any more than what lies on the table, excepting the aces, nor pay more for a beast unless in hearts, and then in that suit always pay and receive double.

A beast off the board is always paid out of the pool; if in playing alone you be beasted off, upon an eight or sixteen board, the adversaries are to receive four or eight a-piece, and so on in proportion to the beast upon the table, but if in hearts, double.

A lost-vole in hearts: pay four to each adversary.

A lost-vole with mats: four, that is, two to the two which the adversaries would otherwise pay you.

A lost-vole with double mats: the four to be returned which you were to have received had you won the vole.

REVERSI.

REVERSI is played by four persons, with every one a box containing six contracts, reckoned as 48 fish each, twenty counters 6 fish each, and 32 fish, making in all 400 fish ; likewise with two pools, called the great and the little quinola pools (the great one to be under the little), which are always to be placed on the dealer's right hand. For this game the tens must be taken out from a pack of cards ; the deal is to the right ; three cards are given to each player the first round, and four to the dealer, afterwards always four, so that the non-dealers will have eleven cards each, and the dealer twelve, with three remaining, to be placed singly in the middle of the table opposite to each non-dealer, who is to put out a card under the pools, and replace it with the card that is opposite to him on the table : the dealer likewise puts out one, but does not take in : should, however, there be three remises or stakes in the pools, then it is in any player's option to take a card or not ; if he do not take, he may see the card, before the same is placed to the discard ; then, previous to playing any card, the opposite parties exchange one with each other. The cards rank as at Whist, and the points in the tricks are forty, each ace reckoning 4, king 3, queen 2, and knave 1.

The points in the discard, which form the *party*, reckon as in the tricks, except the ace of diamonds, and the knave of hearts, as great quinola ; the former reckoning 5, and the latter 4. The

player having the fewest points wins the party. If two have the same number of points, then he who has the fewest tricks has the preference; if points and tricks be equal, then he who dealt last wins; but he who has not a trick has the preference over a trick without points; and the espagnolette played and won, gains the party in preference to the last dealer. When every trick is made by the same person, there is no party; and this is called making the reversis.

The great *quinola* pool is to consist of twenty-six fish, at the commencement, and to be renewed every time the pool is cleared, or has fewer in it than the twenty-six. This stake is attached to the knave of hearts, or great *quinola*, which cannot be put to the discard, unless there are three stakes, or a hundred fish in the pool. The little *quinola* pool, consisting of thirteen fish, attached to the queen of hearts, as little *quinola*, is to be renewed in the same manner, in proportion as the other, and the little *quinola* cannot be put to the discard, unless there are three stakes, or fifty fish in the pool. Each time either or both of the *quinolas* are placed, or played on a renounce, they are entitled to the stakes attached to them, except when there are three stakes in the pool, then the great *quinola* is to receive a hundred fish, and the little *quinola* fifty: on the contrary, each time the *quinolas* are forced, *gergi* or *led out*, the stakes are to be paid in the same proportion as they would have been received, except in the single instance of the person who played the *quinolas* making the reversis, when the *quinola*, to be entitled to any benefit, must be played before the two last tricks.

Every trick must be made by one person to make the *reversis*, which is undertaken when the

first nine tricks are gained by the same person ; there is then an end of the party, and of the quinolas if held by him, except he has played both or either of them before the two last tricks ; but, on the contrary, should his reversis be broken, he then is not only to pay the reversis broken, but the stakes to the pools, for the quinolas he may have played before the reversis was undertaken. All consolations paid for aces or quinolas, by the person undertaking the reversis, are to be returned on winning it.

The *espagnolette* is either simply four aces, or three aces and one quinola, or two aces and two quinolas. The player holding it has a right to renounce in every suit, during the whole game, and if he can avoid winning any trick, and there be no reversis, he of course wins the party in preference to him who is better placed ; but if obliged to win a trick, he then pays the party to the other, and returns the consolations he may have received for aces or quinolas ; and if he have a quinola, he must pay the stake to the pool, instead of receiving it. The player having the *espagnolette* is at liberty to wave his privilege, and play his game as a common one, but loses that privilege the moment he has renounced playing in suit. The player of the *espagnolette* receives consolation in any part of the game, if he force the quinola.

If the reversis be won or broken, the *espagnolette* pays singly for all the company. When the person holding the *espagnolette* can break the reversis, he is paid as before mentioned, by the person whose reversis he broke ; he can likewise undertake the reversis, but then his hand must be played as a common game. Should the *espagnolette* have placed his quinola, and there be

a reversis either made or broken, he is not to receive the stake ; for when the reversis is attempted, the stakes are neither received or paid, except by him who undertakes it. If, by another player having the ace or king of hearts, the espagnolette has in any part of the game either of his quinolas forced, he pays the stake and his consolation to him that forces, except there is a reversis.

The dealer always puts two fish into the great quinola pool, and one into the little ; besides which every player, at the commencement, puts into the former six fish, and into the latter three ; and each time the stakes are drawn, or when there are fewer fish in the pool than the original stake, the pool must be replenished as at first. To the points in the discard, four are to be added for the party. The person who gives an ace upon a renounce, receives a fish from the person who wins a trick ; and if it be the ace of diamonds, he is to receive two. The person who forces an ace receives the same payments from all the players. The great quinola placed upon a renounce, receives six fish ; the little quinola three ; and if either of them be forced, the person who forces receives the same payment from each player ; and these payments should be made immediately, without being asked for. One or more aces, or either of the quinolas, played, or gergi, that is, *led out*, pay the same as if they had been forced to the person who wins the party, but it is for him to recollect and demand them. When either ace or quinola is placed, played, or gergi the last card, it is called *à la bonne*, and paid double, and all payments whatever are double to the person who sits opposite. The payment for the reversis made or broken, is eighty fish ; each player paying twenty, and the opposite party forty,

when the reversis is made ; but when broken, the whole is paid by the person whose reversis is broken ; that is, he pays the person breaking it exactly the same number of fish he would have received had he won it.

LAWS OF THE GAME OF REVERSIS.

1. The person who misdeals loses his deal.
2. If any player take his card without having put out to the discard, the deal is void.
3. The eldest hand ought to take care that all the players have put their stakes into the pools ; as, if they have not, he must make good the deficiency.
4. The discard when put out is not to be changed.
5. The eldest hand should not play a card till the discard is complete ; should he have played, he is permitted, if nobody have played to it, to take up the card and play another.
6. No person must play before his turn.
7. If at the end of the game an error be discovered in the discard, the deal must be made again.
8. When the cards are cut, it is too late to ask for any payments.
9. The player who throws down his game, thinking he can win the remaining tricks, is to pay for any ace or quinola, that has or can be placed or given ; and, in case of undertaking a reversis, the person who might break it can oblige him to play the cards, as he who can break it shall direct.
10. When a player, whether thinking he has won the party or not, asks for the aces or

quinolas led out, before the person who has really won the party has demanded them, he is to pay for him who might otherwise have been called upon to pay.

11. Before playing a card it is always permitted to ask how the cards have been played, but it is not allowed to observe it to others not making the inquiry.

15. The player is permitted to examine all his own tricks at any time, but not to look at those of any other person, except the last trick.

PART III.

MENTAL AND BODILY GAMES

INTRODUCTION.

THERE is no game even of pure skill in which chance has not some share. For example, at the end of a game of Chess or Polish Draughts between two equal players, the result is frequently determined by a disposition which neither had foreseen or combined. Again, the head of one of the players may be on a certain occasion clearer than that of his adversary ; and to this accidental superiority he may be sometimes indebted for a triumph over a superior player.

Bodily games, on the other hand, are sports that require certain physical dispositions, which after a certain age are but the portion of few.

BILLIARDS.

WITH INSTRUCTIONS AND RULES FOR THE FOLLOWING GAMES, *viz.*

The White Winning Game.

The White Losing Game.

The White Winning and Losing Game.

The Winning and Losing Carambole Game.

Red or Carambole Winning Game.

The Red Losing Game.

The Simple Carambole Game.

IN order to play this game well, attention must be given at first to the method of holding the mace or cue, to the position in which the player should stand, and the manner of delivering the ball from either; but these are much more easily acquired by observation, or by the direction of a good player, than by any possible written rules.

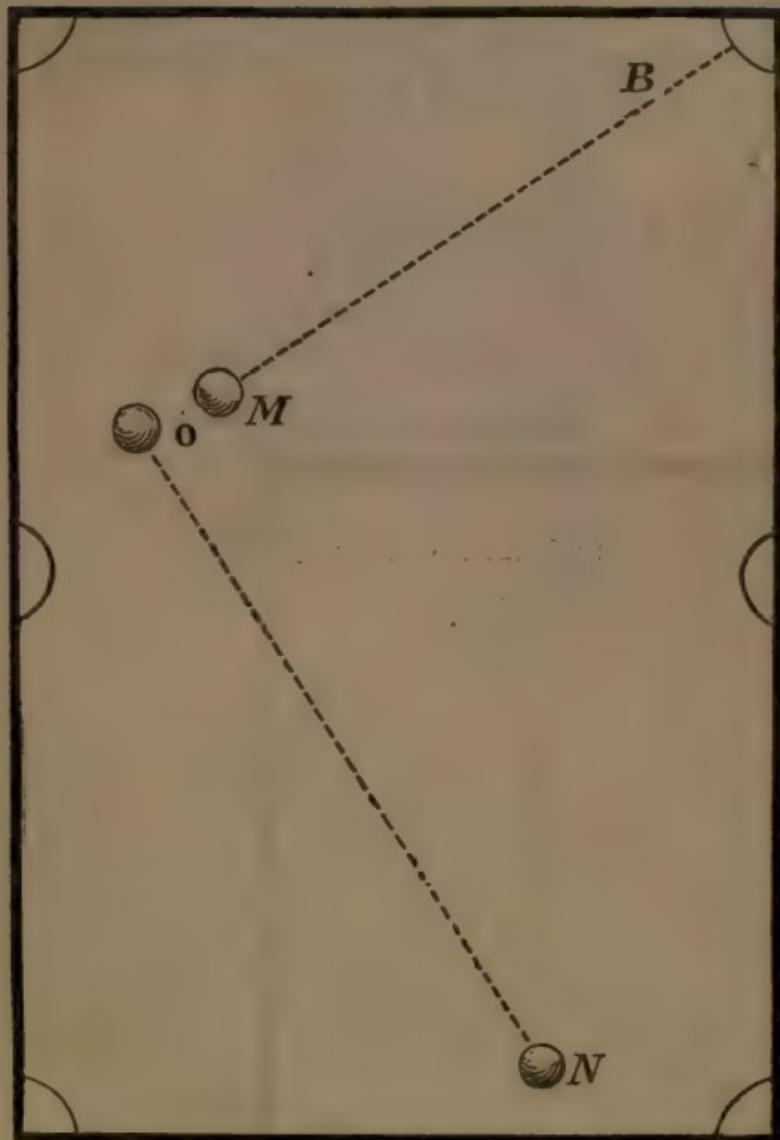
The games usually played till lately were the white winning and the red winning carambole games; but the winning and losing carambole game is now become the favourite.

Almost all the problems at billiards receive their solution from the two following mathematical principles :

1st. The angle of incidence of a ball against one of the cushions is equal to the angle of reflection.

2dly. When a ball strikes another, if we draw a right line between their centres, which will of course pass by the point of contact, this line will be the direction the ball will follow after it is struck.

Fig. 1.



Two balls being placed, the first at N, and the second at M, you must strike the ball M at o, in order to pocket M at B.

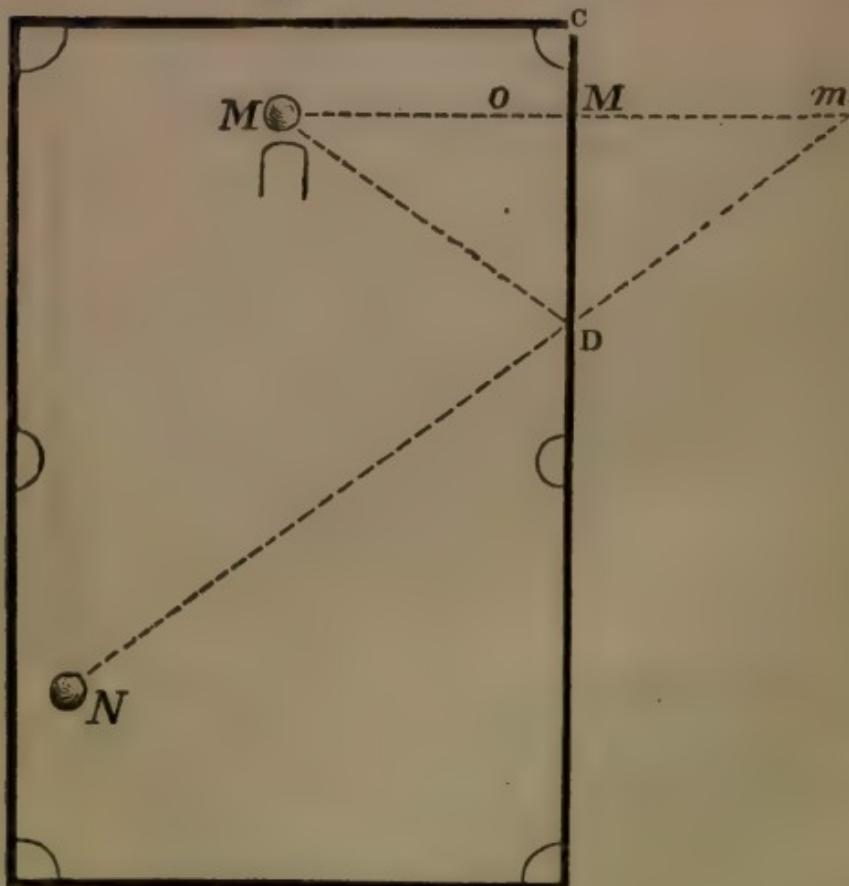
Through the centre of the pocket B, and that of the ball M, conceive a right line; the point in which it will intersect the surface of the ball M, on the side opposite to the pocket, will be the

point on which it should be struck to give it the requisite direction.

Again, conceiving the imaginary line prolonged by the radius of the ball, the point where it will terminate will be that by which the ball N will pass.

In this consists all the skill of the game; but although it must be confessed, that mathematical theory alone will never form a player, still it will be found, when fine practice is based upon sound theory, that the most brilliant results are attained.

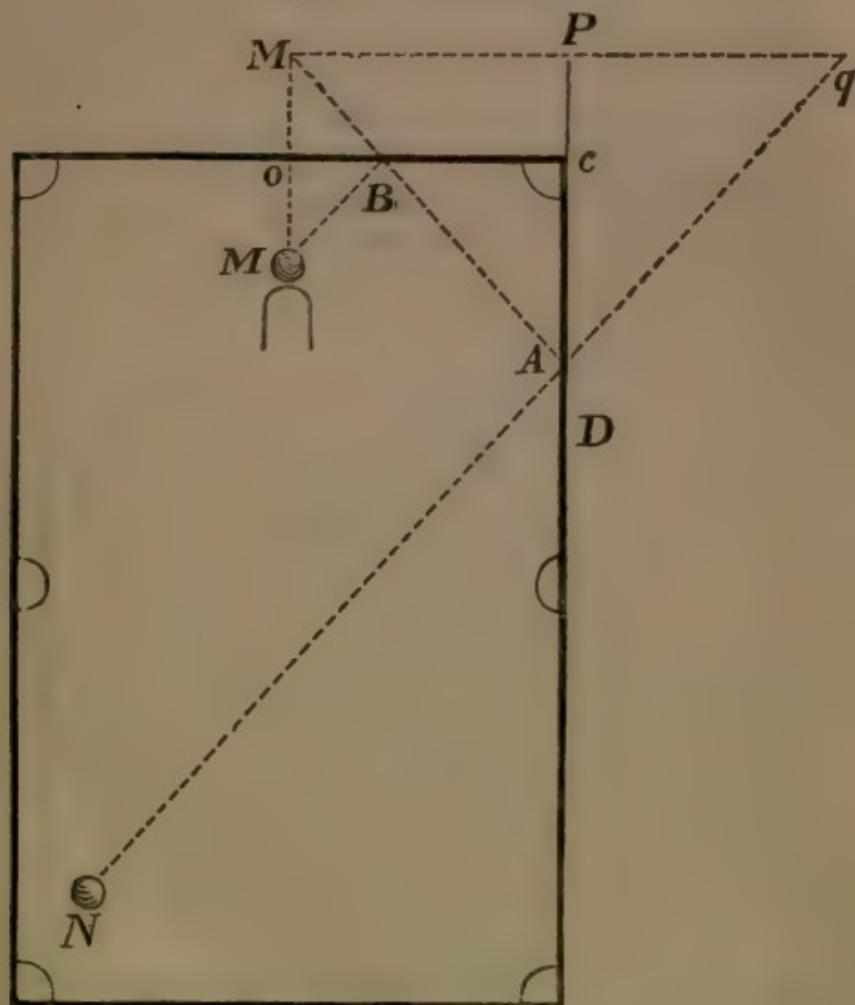
Fig. 2.



The ball M is almost concealed by the bricole with respect to N, so that it would be impossible

to hit it on a straight line. You must then endeavour to do so by reflection. For that purpose conceive upon the side $c\ D$ the perpendicular $M\ o$ prolonged to m , so that $o\ M$ may be equal to $M\ m$. Aim at the point m , and you will strike M , by reflection from $c\ D$.

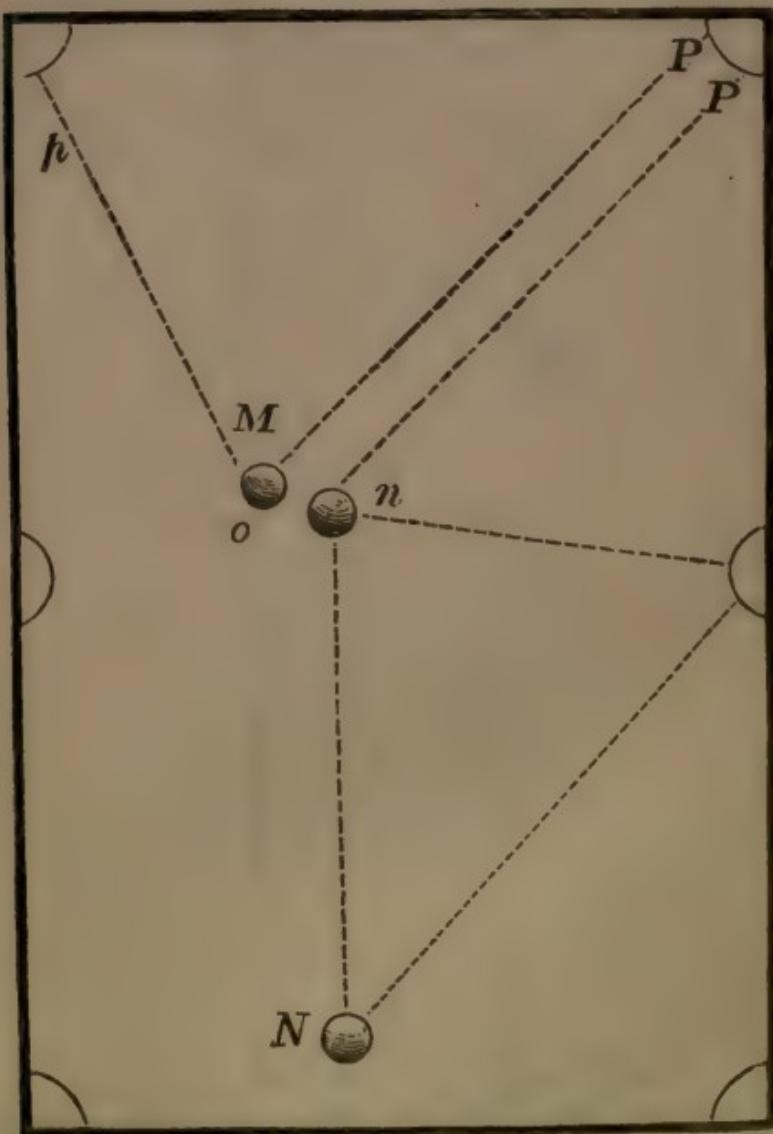
Figure 2, continued.



To strike the ball M , after two reflections.—
From point M , conceive upon the side $B\ c$, the perpendicular $M\ o$ extended to $o\ M$, so that $M\ o$ may be equal to $o\ M$. From the point M ,

draw or conceive the perpendicular M P extended to q , so that q P may be equal to M P. Aim at the point q , and the ball, after striking the cushions at the points A and B, will hit the ball M.

Figure 3.



But it is important to discern what also will be the direction of your own ball after striking obliquely that of your adversary.

To discover the direction of a ball after striking another.—Strike the ball N, which will hit M at o, through the point o draw the tangent o P, and through the centre of the ball N, when arrived at the point of contact, draw the parallel line n P to o P, and M P will be the direction of your ball after striking that of your adversary.

In the present edition, I have suppressed all the calculations of the odds; and for this reason—that, in calculating the chances of the respective players, the position of the balls upon the table must form the most important element of the calculation—one, too, the value of which would be instantly estimated by a mathematical eye, and in the absence of which, any calculations that might be attempted would be erroneous.

THE DIFFERENT GAMES OF BILLIARDS.

1. *The white winning game*, played with two white balls, is twelve in number, when two persons play, and fifteen when four play; scored (independently of forfeitures) from winning hazards only.

2. *The white losing game*, also twelve in number, played with two white balls, is the reverse of the winning; the points being scored from losing and double, or winning and losing hazards.

3. *The white winning and losing game*, is a combination of the two preceding; all balls put in by striking the adversary's ball first, reckon towards the game.

The three preceding games should be made introductory to the knowledge of those with three or more balls, which are more complicated and difficult.

4. *Choice of balls*,—in which the player chooses

his ball each time; an incalculable advantage, generally played against the losing and winning game.

5. *The bricole game*, signifies being required to strike a cushion from whence the ball is to rebound so as to hit that of the adversary, reckoned equal to giving eight or nine points. When both parties play bricole, the game is ten, scored from bricole hazards, and forfeitures.

6. *The bar-hole game*, so styled because the hole which the ball should be played for is barred, and the player strikes for another hole. When this is played against the common game, the advantage to the last-mentioned is calculated at six points.

7. *One-hole*, in which all balls that go into one hole are counted, and the player who best lays his ball at the brink of that particular hole, has the advantage. The lead should be given from that end of the table where the last hazard has been made.

8. *Hazards*, so styled as depending entirely upon making hazards, no account being kept of game. Many persons may play at a table with balls that are numbered, though to avoid confusion seldom more than six play at once. The person whose ball is put in pays a fixed sum for each hazard to the player, and he who misses pays half the same to him whose ball he played at. The only general rule is not to lay any ball a hazard for the next player, which may best be done by always playing upon him whose turn is next, and either bringing his ball close to the cushion, or putting it at a distance from the rest.

9. *The doublet game* is ten in number, played with two balls, most commonly against the white winning game, and no hazard is scored unless

made by a reverberation from the cushion, calculated as equivalent to giving five points.

10. *The commanding game*, where the adversary fixes upon the ball which the striker is to play at, reckoned equal to having fourteen points out of twenty-four: usually given by a skilful player against the common game of an indifferent one.

11. *The limited game* is very seldom played. In it the table is divided by a line, beyond which, if the striker pass his ball, he pays forfeit.

12. *The red, or winning and losing carambole game*, consists of twenty-one or twenty-four points, reckoned from caramboles, and from winning and losing hazards, equally; both white and red. Each of the white hazards and the carambole counts two; the red hazard, three points.

13. *The winning carambole* (or red) game is sixteen or eighteen in number, obtained (independently of the forfeitures, which every game has peculiar to itself) by winning hazards and carom only.

14. *The losing carambole* is nearly the reverse of the winning, and consists of sixteen or eighteen points, made by caramboles, losing, and double hazards; counted as in the winning and losing game.

N.B. The simple carambole, which is only a trifling variation from the above, the reader will find particularized at page 321.

The carambole games are played with three balls; one red, which is neutral, and termed the *carambole*: the other two white: one of them allotted to each player. The *carambole* is placed upon a spot on a line even with the stringing-nail at the bottom of the table; and after leading from the upper end, the striker is either to make the winning or losing hazard, according to the parti-

cular game, or to hit with his own ball the other two successively ; for which stroke, called a *carambole* or *carom*, he obtains two points.

15. *The Russian carambole* varies from the common carambole in the following particulars :

The red ball is to be placed upon the usual spot ; but the player at the commencement of the game, or after his ball has been holed, is at liberty to place it where he pleases. The leader, instead of striking at the red ball, should lay his own gently behind the same, and the opponent may play at either of them ; if the said opponent play at and hole the red ball, he scores three ; then the red ball is to be replaced upon the spot, and the player may take his choice again, always following his stroke till both balls are off the table ; he gains two points for every carambole ; but if in doing that he hole his own ball, then he loses as many as otherwise he would have obtained ; and if he strike at the red ball, and should carambole and hole that ball and his own, he loses five points ; and when he holes all three balls he loses seven, which respective numbers he would have won had he not holed his own ball.

16. *The caroline or carline game* is played either on a round or square table with five balls, two white, one red, another blue, and the caroline ball yellow. The red ball is to be placed on its usual spot, the caroline ball exactly in the middle of the table, and the blue ball between the two at the lower end of the table. The striking spot is at the upper end, in a parallel line with the three balls. The game is 42, scored from caramboles and hazards ; the red hazard counts three, the blue two, and the yellow, when holed in the caroline or middle pocket, is reckoned at six points.

17. *The four game* consists of two partners on each side at any of the common games, who play in succession after every winning hazard lost.

18. *The cushion game* consists in the striker playing his ball from the top of the baulk cushion instead of following his stroke upon the table, and is generally played in the winning, or winning and losing game, reckoned equal to giving 6 points.

RULES AND REGULATIONS TO BE OBSERVED AT
THE WHITE WINNING GAME.

1. String for the lead and choice of balls.
2. In stringing, the striker should stand with both feet within the limits of the corner of the table, and not place his ball beyond the stringing nails or spots: his adversary alone is bound to see that he stands and plays fair, otherwise he is not subject to any forfeiture.
3. If the leader follow his ball with either mace or cue, beyond the middle hole, his adversary may make him lead again.
4. Immediately after a hazard has been won, the balls are to be broken, and the striker is to lead as at first.
5. When a hazard has been lost in either of the corner holes, the leader, if his adversary require it, is to lead from the end of the table where the hazard was lost, but if the hazard were lost in either of the middle holes, the leader may play from either end of the table.
6. If the striker miss his adversary's ball, he loses one point; and if by the same stroke he should hole his own ball, he loses three points.
7. Whether the stroke is foul or fair, if the striker hole his own or both balls, or force either

or both of them over the table or in a cushion, he loses two points.

8. If the striker force his adversary's ball over the table, and his adversary should chance to stop the same, so as to make it come on the table again, the striker nevertheless wins two points.

9. If the striker force his own ball over the table, and his adversary should stop and cause it to come on the table again, the striker loses nothing, but retains the lead, because his adversary ought not to stand in the way, or near the table.

10. If the striker miss his adversary's ball, and force his own over the table, and it should be stopped by the adversary, he loses one point, but has the lead if he choose.

11. If the striker who plays the stroke should make his adversary's ball go so near the brink of a hole, as to be judged to stand still, and it should afterwards fall in, the striker wins nothing, and the ball must be put on the brink where it stood, for his adversary to play at the next stroke.

N.B. There is no occasion for challenging the ball if it stop.

12. If the striker's ball should stand on the brink of a hole, and in attempting to play it off he should make the ball go in, he loses three points.

13. If a ball should stand on the brink of a hole, and should fall in before or when the striker has delivered his ball from his mace or cue, so as to have no chance for his stroke, in that case the balls must be replaced and the striker play again.

14. The striker is to pass his adversary's ball, more especially if he miss the ball on purpose, and his adversary may oblige him to place the ball where it stood, and play³ until he has passed.

15. If the striker play with a wrong ball, he loses the lead.

16. If the ball should be changed in a hazard or game, and not known by which party, the hazard must be played out by each with their different balls, and then changed.

17. If the striker play with his adversary's ball, and should hole, or force the ball he played at over the table, it is deemed a foul stroke.

18. If the striker play with his adversary's ball, and miss, he loses one point, and if his adversary discover that he hath played with the wrong ball, he may part the balls and take the lead.

19. In all the before-mentioned cases with the wrong ball, if the error be not discovered, the adversary must play with the ball the striker played at throughout the hazard, or part the balls and take the lead.

20. Whoever proposes to part the balls, and his adversary agrees to it, the proposer loses the lead.

21. Two missings do not constitute a hazard, unless previously agreed on to do so.

22. When four people play, each party may consult with, and direct his partner in any thing respecting the game, &c.; and the party who misses twice before a hazard is made, is out, and it is his partner's turn to play; and though his adversary should hole a ball, so as to make a hazard at the stroke following the two missings, yet the party who did not make the two missings is to play, as he cannot be supposed to be out who has not made a stroke.

WHITE LOSING GAME.

When a person is tolerably well acquainted with the winning game, he should then learn the losing game (the reverse of the winning), which is a key to Billiards in general. It depends entirely upon the defence, and a knowledge of the degree of strength with which each stroke should be played, either to defend or make a hazard ; for if a person, who has a competent knowledge of the game, should not have a hazard to play at, he must endeavour to lay his own ball in such a position, that his adversary may not have one to play at the next stroke. For a losing game, hazard is much more easy to be made, when well understood, than a winning game hazard is in general.

1. At the beginning you must string for the lead and the choice of the balls, the same as in the rules at the white winning game.
2. If the striker miss the ball, he loses one : and if his ball go into a hole by the same stroke, he loses three points.
3. If the striker hole his adversary's ball, he loses two points.
4. Forcing either or both the balls over the table, or on a cushion, reckons nothing ; but the striker loses the lead.
5. If the striker miss his adversary's ball, and forces his own over the table, &c., he loses one point and the lead.
6. If the striker hole his own ball, he wins two ; and if he hole both balls, he wins four points.
7. If the striker hole either of the balls, and forces the other over the table, &c., he loses the lead only.

The rest of the articles of regulations, &c., as in the winning games, are likewise to be observed.

THE WHITE WINNING AND LOSING GAME,

Is a combination of the two preceding : and all the balls put in by striking the adversary's ball first reckon towards the game.

Players are particularly requested to observe, that except those rules which constitute the peculiarity of each game, certain general regulations are applicable to every one of them, which to avoid repetition, are mostly given under the head of the Winning and Losing Carambole Game.

THE WINNING AND LOSING CARAMBOLE GAME,
PLAYED WITH THREE BALLS, TWO WHITE AND
ONE RED,

Is twenty-one or twenty-four in number, reckoned both from winning and losing hazards and caramboles, is by far the fullest of variety, and of all other games is the best calculated to afford amusement; the chances are so numerous, that the odds of it are not usually calculated, but generally laid according to fancy, or the custom of the table.

The twenty-one game is most common, but that of twenty-four more fashionable.

Rules, &c. in the Winning and Losing Carambole Game; the general laws and regulations of which are applicable to all the other games.

1. The game commences by stringing for the lead and the choice of balls.

2. In stringing, the striker must place his ball within the striking ring ; and, if his adversary desire it, must stand within the limits of the corner of the table.

3. He who, after playing at the bottom cushion, brings his ball nearest to the cushion at the upper or baulk end of the table, wins the lead, and chooses his ball.

4. After the first person has strung for the lead, if the adversary who follows should make his ball touch the other, he loses the lead.

5. By holding his own ball either in stringing or leading, the player loses the lead.

6. Should the leader follow his ball with either mace or cue beyond the middle hole, it is no lead ; and his adversary may make him lead again.

7. The leader must place his ball within the ring, between the striking-nails or spots at the upper end of the table ; and the same must be observed after each losing hazard has been got.

8. The red ball must be placed on the lower of the two spots, at the bottom of the table.

9. When either of the white balls has been holed, &c., it must be replaced in, and played from the striking ring, as at the commencement of the game.

10. When the red ball has been holed or forced over the table, it must be replaced on the same spot as at the beginning of the game, and the present striker is bound to see it thus replaced, otherwise he cannot win any points while it is off the spot, and the stroke he may make is deemed foul.

11. If the striker do not hit his adversary's ball, he loses one point ; and, if by the same stroke, he

pocket his own ball, he loses three points and the lead.

12. If the striker force either of the balls over the table, he loses the lead.

13. If the striker force his own, or either of the other balls over the table, after having made a carambole or hazard, he gains nothing, and also loses the lead.

14. If the striker hit both the red and his adversary's ball with his own ball, this is called a *carambole* or *carom*.

15. If the striker with his own hole his adversary's ball, he wins two points.

16. If the striker hole the red ball, he wins three points.

17. If the striker hole his own off his adversary's ball, he wins two points.

18. If the striker hole his own off the red ball, he wins three points.

19. If the striker hole both his adversary's and the red ball, he wins five points.

20. If the striker, by playing at the red ball, hole his own and the red ball, he wins six points.

21. If the striker, by hitting the white ball first, hole both his own and the adversary's ball, he wins four points.

22. If the striker, by striking at the red ball first, hole both his own and his adversary's ball, he wins five points : three for holing his own ball off the red, and two for holing the white ball.

23. If the striker play at his adversary's ball first, and hole his own ball and the red, he wins five points :—two for holing his own ball off the white, and three for holing the red ball.

24. If the striker play at his adversary's ball, and hole it, at the same time that he pockets both his own ball and the red, he wins seven

points:—two for holing his own ball off the white; two for holing his adversary's; and three for holing the red ball.

25. If the striker play at the red, and hole his own ball off the same, and the red ball, and his adversary's, by the same stroke, he wins eight points:—three for holing his own ball off the red; three for holing the red; and two for holing the white ball.

26. If the striker make a carambole, and by the same stroke pocket his adversary's ball, he wins four points:—two for the carambole, and two for the white hazard.

27. If the striker make a carambole, and pocket the red ball, he wins five points:—two for the carambole, and three for the red hazard.

28. If the striker should carambole and hole both the red and his adversary's ball, he gains seven points:—two for the carambole; two for the white; and three for the red ball.

29. If the striker make a carambole by striking the white ball first, and hole his own by the same stroke, he wins four points:—two for the carom, and two for the white losing hazard.

30. If the striker make a carambole by striking the red ball first, and by the same stroke pocket his own ball, he wins five points:—two for the carambole, and three for the red losing hazard.

31. If the striker play at the white ball first, and should make a carambole, and also hole his own and his adversary's ball, he wins six points:—two for the carambole, and two for each white hazard.

32. If the striker play at the red ball first, and carambole, and should likewise hole his own and his adversary's ball, he gains seven points:—two

for the carom ; three for the red hazard ; and two for the white hazard.

33. If the striker should carambole by playing first at the white ball, and also hole his own and the red ball, he wins seven points :—two for the carom ; two for the white losing hazard ; and three for the red winning hazard.

34. If the striker should carambole by striking the red ball first, and at the same time hole his own, and the red ball, he wins eight points :—two for the carom ; three for the red losing, and three for the red winning hazard.

35. If the striker should carambole by striking the white ball first, and hole his own and his adversary's, and the red ball, he wins nine points :—two for the carambole ; two for each of the white hazards ; and three for the red hazard.

36. If the striker should carambole by striking the red ball first, and by the same stroke hole his own and the red, and his adversary's ball, he gains ten points :—two for the carambole ; three for the red losing ; three for the red winning, and two for the white winning hazard.

37. After the adversary's ball is off the table, and the two remaining balls are either upon the line, or within the stringing-nails or spots, at the upper end, where the white balls are originally placed in leading, it is called a *baulk* : and the striker who is to play from the ring must strike the opposite cushion, to make his ball rebound, so as to hit one of the balls in the baulk ; which, if he do not, he loses one point.

38. It sometimes happens, after the red ball has been holed or forced over the table, that one of the white balls so occupies its place, that it cannot be put upon its proper spot without touching the same. In such a case, the marker must hold the

red ball in his hand, while the striker plays at his adversary's ball, and immediately afterwards replace the red on its proper spot, so that it may not prevent a carambole, &c.

39. If the striker play with the wrong ball, it is a foul stroke.

40. If the striker be going to play with the wrong ball, no person in the room ought to discover it to him, except his partner, when they are playing a double match.

41. If the striker play with the wrong ball, and his adversary should not discover it, he may reckon all the points gained by the stroke, and the marker is obliged to score them.

42. If the striker, after having made a hazard or carom, move with his hand or stick either of the balls which remain upon the table, the stroke is deemed foul.

43. If a ball be found to have been changed during the game, and it is not known by which player, the game must be played out with the balls as they then are.

44. No one has a right to take up or otherwise move a ball, without permission of the adversary.

45. If a striker touch his ball with the instrument twice, the stroke is foul.

46. If a striker be impeded in his stroke by his adversary or a spectator, he has a right to re-commence the stroke.

47. If the striker should accidentally move his own ball, without intending at the time to make a stroke, he loses no point; but the adversary may replace the ball.

48. If the striker touch his ball, and make his mace or cue go over or past it, he loses one point.

49. If either of the players, in the act of striking, happen to move his own, the adversary's, or the red ball from the place it occupied on the table, the stroke is foul.

50. When the striker's, and either of the other balls are so close as to touch, and in playing the former off, the latter is moved from its place, the stroke is considered foul.

51. If the striker, in attempting a stroke, do not touch his ball, it is no stroke, and he must strike again.

52. If, when the balls are very near each other, the striker should make his ball touch the other, it is to be considered a stroke, though not intended as such.

53. If the striker play upon a ball which is still running, the stroke is foul.

54. Whoever stops a ball when running loses the lead, if his adversary do not like the ball he has to play at the next stroke.

55. Whoever retains his adversary's cue or mace, when in the act of striking, makes the stroke foul.

56. If the striker interrupt the course of his own ball, when running towards a hole, after having made a miss, and it is the opinion of the marker that it would have entered the pocket, had it not been interrupted, he loses three points.

57. And if the striker should interrupt, stop, or put his adversary's ball out of its course, when running towards or into a hole, he is subjected to the same forfeiture.

58. If the striker, after having made a hazard, or carambole, interrupt the course of his own ball, the stroke is foul; and he cannot score any of the points he may have thus made.

59. He who blows upon a ball when running

makes the stroke foul ; and if his own ball were running towards a hole, or near a hole, and he be seen by his adversary to blow upon it, he loses two points.

60. If the striker play with both feet off the ground, the stroke is deemed foul.

61. Whoever strikes the table when the ball is running, makes the stroke foul.

62. If the striker throws his mace or cue upon the table so as to baulk his adversary, he causes him to make a foul stroke.

63. If a ball be made to go extremely near the brink of a hole, and after sensibly standing still, falls into it, the striker wins nothing, and the ball must be put on the same brink where it stood before the adversary makes his next stroke ; and if it should fall into the hole at the instant the striker hath played upon his ball, so as to prevent the success of his strcke, the striker's and the adversary's balls must be placed in the same relative position, and the striker play again.

64. He who will not play the game out, loses the same.

65. If a person agree to play with the cue, he is obliged to play with it during the whole of the game or match ; but if no agreement have been made, he may at any time change it for the mace, and *vice versâ*. But when the parties agree to play mace against cue, the mace-player has no right to use a cue, nor has the cue-player any right to use a mace, without permission.

66. When a person agrees to play with a cue, he must play every ball within his reach with the point thereof ; and if he should agree to play with the butt of the cue, he has no right at any time to play with the point, without permission. Also, when the parties agree to play *point and point* of

the cue, neither of them has any right to use the *butt*; but every person who plays with a cue, may use occasionally a long one, and in such case he may play with the point of a long cue or a mace.

67. If the striker should make his mace or cue touch both balls at the same time, it is deemed a foul stroke, and if discovered by the adversary, he wins nothing for any points he might make by the stroke, and the adversary may break or part the balls.

68. Whenever a foul stroke is made, it is at the option of the adversary either to part the balls, and play from the striking ring, as at the beginning, or, if the balls happen to be in a favourable position for himself, to suffer the preceding striker to score the points; which the marker is obliged to do, in every case where the balls are not broken.

69. The adversary only is bound to see that the striker plays fair, which if he neglect, the striker wins all the points he may have made by that particular stroke, and the marker is obliged to score them.

70. No person has a right to discover whether a stroke be fair or foul until asked, unless during a four match; and in that case, none but the player or his partner has a right to ask it.

71. Should a dispute arise between the players concerning the fairness of a stroke, the marker alone is authorized to decide, and from his decision there is no appeal: but if he happen to be incompetent, the majority of the disinterested company then present should decide the dispute.

72. Whoever proposes to part the balls, and his adversary agrees, the person who made the proposal loses the lead.

73. No person in the room has a right to bet more than the odds on a hazard or a game; but if he err through ignorance, he should appeal to the marker, or the table of the odds.—Each person who proposes a bet, should name the precise sum; and also should be extremely careful not to offer a bet when the striker has taken his aim, or is going to strike; and no bet ought to be proposed on any stroke, that may have any tendency to influence the player.—If A propose a bet which is accepted by B, it must be confirmed by A, otherwise it is no bet.—If any bets be laid on the hazard, and the striker should lose the game by a miss, at the stroke in question, it cannot be a hazard, the game being out by a miss. In all cases the betters are to abide by the determination of the players, and the betters have a right to demand their money when their game is over.

74. Every person ought to be very attentive, and listen for the stroke, before he opens the door of a billiard room.

75. The striker has a right to command his adversary not to stand facing or near him, so as to annoy or molest him in his stroke.

76. Each party is to take care of his own game, and his adversary has no right to answer any questions; as,—if the ball be close?—if he touch the ball? &c.

77. The marker should make those persons who do not play, stand from the table, and give room for the players to pass freely round.

78. Those who play ought to be particularly careful and attentive to their strokes, when any bets are depending thereon: but even should they play carelessly, the bets must in every case be decided by the event.

79. No person has any right to discover to the

player in what manner he may play his ball. And if it be done, and discovered by the adversary, he may prevent the striker from scoring the points he has made by the stroke. Neither, after a stroke has been played, has any one a right to detect any error the striker may have committed.

RED OR CARAMBOLE WINNING GAME, PLAYED
WITH THREE BALLS, TWO WHITE AND ONE
RED.

The game is sixteen or eighteen in number, formed from winning hazards and caramboles.

There are two methods of playing this game : one by the players striking alternately, in which the number of points is usually 16 ; the other where the players follow their successful strokes, and then the points are 18 ; the latter mode is now generally used.

The red or carambole winning game is full of variety ; and there being so many chances in it, which makes it a game of great uncertainty, the odds are not calculated, but bets are generally laid according to fancy, or to the custom of the table.

1. String for the lead, &c., as in the winning and losing game.

2. The red ball is to be placed on a spot made for the purpose, in the centre, between the stringing nails at the bottom of the table, higher up than in the carambole winning and losing game.

3. After the first striker has played, his adversary is to play next, and so on alternately ; or the

striker is to follow his gaining stroke, as may have been agreed upon.

4. If the striker miss both balls, he loses one point; if by the same stroke he pocket his own ball, he loses three points.

5. If the striker carambole, he wins two points.

6. If the striker hole his adversary's ball, he wins two points.

7. When the striker holes the red ball, he wins three points.

8. If the striker hole his adversary's and the red ball by the same stroke, he wins five points.—Two for the white, and three for the red ball.

9. If the striker carambole and at the same time pocket his adversary's ball, he wins four points.—Two for the carom, and two for holing the white ball.

10. If the striker should carambole and hole the red ball, he wins five points.—Two for the carom, and three for pocketing the red ball.

11. If the striker carambole, and by the same stroke hole both his adversary's and the red ball, he wins seven points.—Two for the carambole, two for the white, and three for the red hazard.

12. Forcing either of the balls over the table, as in the winning and losing game, reckons nothing.

13. If the striker force his ball over the table, and at the same time should make a carambole or hole either of the other balls, he gains nothing by the stroke.

14. When the striker forces either his adversary's or the red ball over the table, and by the same stroke holes his own, he loses nothing.

15. If the striker make a foul stroke, and at the same time should hole his own ball, he loses two or three points, according to which ball he struck first.

16. If the striker play with the wrong ball, and at the same time make a losing hazard, he loses either two or three points, according to which ball he struck first, and the stroke is considered foul.

17. If the striker should play with the wrong ball and miss both the remaining balls, he loses one point, and if the ball should go into a hole, he loses three points, and the stroke is deemed foul.

18. If the striker playing at the baulk, should hole his own ball, he loses three points.

19. If the striker pocket either or both the balls, or should carambole when the balls are within the baulk, he wins two, three, five, or seven points, according to the stroke.

20. When the striker plays from the spot or circle, at either of the balls within the baulk, he is to pass one of the balls, otherwise it is no stroke.

21. When the striker's ball and the red ball are within the baulk, he is not obliged to pass the ball.

22. When either of the white balls has been holed, and the red or the white stands so near that the striker cannot place this ball without touching the other, the marker must hold the red ball in his hand, as directed in the 37th rule of the Winning and Losing Game.

23. If either of the balls should be before, behind, or on one side of the spot, so that the striker is able to place his own ball without touching the other, he must play the ball as he can from the spot, as neither of the balls must be removed to make way for him.

RED OR CARAMBOLE LOSING GAME, PLAYED WITH
THREE BALLS, TWO WHITE AND ONE RED.

The game is sixteen or eighteen in number, as in the Red Winning Game, scored by caramboles, losing and double hazards.

The Red or Carambole Losing Game requires greater judgment than the winning, and depends materially on the skill of the player; the chances in it may happen sometimes to vary more than at the Winning Carambole Game, especially if the players do not properly understand the skilful part.

1. THE game begins in the same manner as the carambole winning game.
2. If the striker miss both the balls, he loses one point; and if he hole his own ball by the same stroke, he loses three points.
3. If the striker hit the red ball first, and should hole it, he loses three points, and the ball must be immediately replaced on its proper spot.
4. If the striker hit the white ball first, and should hole it, he loses two points.
5. If the striker hole the white and the red ball by the same stroke, he loses five points; viz. two for holing the white ball, and three for the red.
6. If the striker should make a carambole, and hole either his adversary's or the red ball only, he wins nothing for the carambole, and loses two points if he struck the white, and three if he hit the red ball first.
7. If the striker make a carambole, he wins two points.

8. If the striker make a carambole by striking the white ball first, and should hole his own ball by the stroke, he wins four points; *viz.* two for the carambole, and two for holing his own ball on the white.

9. If the striker make a carambole by striking the red ball first, and by the stroke should hole his own ball, he wins five points; *viz.* two for the carambole, and three for holing his own ball on the red.

10. If the striker make a carambole by striking the white ball first, and by that stroke should hole his own and his adversary's white ball, he wins six points; *viz.* two for the carambole, two for holing his own ball on the white, and two for holing his adversary's or the white ball.

11. If the striker make a carambole by striking the red ball first, and by the said stroke should hole his own ball, and his adversary's white ball, he wins seven points; *viz.* two for the carambole, three for holing his own ball on the red, and two for his adversary's white ball.

12. If the striker make a carambole by striking the white ball first, and by the stroke should hole his own and the red ball, he wins eight points; *viz.* two for the carambole, two for holing his own ball on the white, and three for holing the red ball.

13. If the striker make a carambole by striking the red ball first, and by the stroke should hole his own and the red ball, he wins eight points; *viz.* two for the carambole, three for holing his own ball on the red, and three for holing the red ball.

14. If the striker make a carambole by striking the white ball first, and should hole all the three balls, he wins nine points; *viz.* two for the carambole, two for holing his own ball on the white,

two for holing his adversary's white ball, and three for holing the red ball.

15. If the striker make a carambole by striking the red ball first, and by the stroke should hole all the balls, he wins ten points; *viz.* two for the carambole, three for holing his own ball on the red, three for holing the red, and two for holing his adversary's white ball.

16. If the striker hole his own ball on the white ball, he wins two points; and if on the red, three points.

17. If the striker, by striking the white ball, should hole his own ball and his adversary's white ball, he wins four points; *viz.* two for holing his own ball on the white, and two for holing his adversary's ball.

18. If the striker, by striking the red ball, should hole his own ball and his adversary's white ball, he wins five points; three for holing his own ball on the red, and two for holing the white ball.

19. If the striker strike his adversary's white ball, and should hole his own ball and the red, he wins five points; *viz.* two for holing his own ball on the white, and three for holing the red ball.

20. If the striker strike the red ball, and should hole his own ball, and his adversary's white ball, he wins five points; *viz.* three for holing his own ball on the red, and two for holing his adversary's white ball.

21. If the striker strike his adversary's white ball, and should hole all three balls by the same stroke, he wins seven points; *viz.* two for holing his own ball on the white, two for holing his adversary's white ball, and three for holing the red ball.

22. If the striker strike the red ball, and should hole all the balls by the same stroke, he wins eight

points; *viz.* three for holing his own ball on the red, three for holing the red ball, and two for holing the white ball.

23. If the striker strike the red ball, and should hole his own and the red ball, he wins six points; *viz.* three for holing his own ball on the red, and three for holing the red ball.

N.B. The rest of the rules and regulations are likewise to be observed, as in the rules for the Carambole Winning Game, &c.

THE SIMPLE CARAMBOLE GAME, PLAYED WITH THREE BALLS, AS IN THE OTHERS.

The game is twelve in number, arising from caramboles and forfeitures.

This game, possessing very few chances, requires both skill and judgment, and is seldom played alone, but generally by able proficients against the winning and losing, or the winning game of novices, considered equal to giving fifteen out of twenty-four points. It is also played two different ways; in one the hazards lose, in the other they are not reckoned; the first mentioned is the customary method, where the striker, upon making a hazard, loses as many points as he by that stroke would have gained in either the winning or losing game.

1. The game is begun as in the preceding caramboles.

2. If the striker miss both balls, he loses one; and when he pockets his own ball, he loses three points.

3. When the striker makes a carambole, he scores two, except he holes his own ball on that of the adversary, or holes the adversary's ball, and then he loses two points.

4. And when he caramboles, and holes either his own ball on the red, or holes the red ball, he loses three points.

5. And also should he hole both his own and the adversary's ball, then he loses four points.

6. And when he holes both his own and the red ball, he loses five points, if he played at the white, and six if at the red ball.

7. And likewise if he should hole all three balls at one stroke, he loses seven points, if he played at the white, and eight if at the red ball.

The rest of the rules and regulations used in this are similar to those belonging to the other games, when they are not contradictory to any of the seven above-mentioned.

CHESS.

THE works already extant on this beautiful and scientific game would form a voluminous library of themselves, yet so little do they differ from each other, that the system of attack and defence laid down by the earliest writer upon Chess, Damiao de Goa, a Portuguese, who flourished about the end of the fifteenth century, is identically the same as the system laid down by Mr. Lewis in his recent publication, which may justly be considered as our most classical authority upon the science of Chess.

For this reason, and impressed with the convic-

tion that study alone will never form a chess player, I have in the present suppressed a great proportion of the illustrations given in the former editions of this work; enough, however, remain for all the purposes of study, which, after all, imparts but a mere mechanical skill.* The essential point is to make the learner thoroughly acquainted with the fundamental principles of the game, when practice with *good* players will soon lead to their skilful application.

The fundamental principles of Chess are very simple, and consist—

1st. In discovering the tactical or weak point of the adversary's position.

2nd. In a rapid concentration and skilful direction of the mass of your forces upon that tactical point.

The first depends in a great measure upon the *coup d'œil* of the player; and when this quality is possessed in an eminent degree, it is rather intuitive than acquired.

The second must depend upon his practical skill, and upon his knowledge of the mechanism of each piece, in order to play them so as to combine their simultaneous action, according to the qualities inherent in each, for which ample instruction will be found in Mr. Hoyle's Directions. Confining myself, therefore, to general principles, I shall lay it down as a maxim, that the offensive is the most advantageous strategy; for if the fundamental principle of the game consists in directing the mass of your forces upon the adversary's tactical point, it must follow as a necessary conse-

* Rousseau, in his Confessions, bears out this assertion; the philosopher shut himself up for six weeks, and pored over *in vain* the most scientific treatises of his day—for on his first trial he was beaten by a mere tyro.

quence, that the first means of applying the principle consists in seizing the initiative or the offensive. In order, therefore, to apply skilfully this incontrovertible principle, *castle* as early as possible, by which you place your king in a position of security, and bring a powerful piece, the rook, into action. But if, on the other hand, your adversary should have seized the initiative, do not *castle* until he has well developed his attack, and the *castle* on the opposite side, by which you remove your king out of the tactical direction, or the radius of attack, and oblige your adversary to change his front. Should you, on the other hand, imprudently *castle* on the side on which your adversary has developed his attack, you execute a flank march before an army in position, and, like Soubise at Rosbach, will infallibly lose your army and your honour. Act, therefore, always *en masse*, reconnoitre well your adversary's position, and remember that it is skilful disposition and a rapid combination of simultaneous attacks which determines the result. Chess being a game of pure skill, induces many people to look upon a great chess player as a being endowed with a superior capacity; but this I have no hesitation in ranking as a popular fallacy. Some of the greatest chess players have in other respects been mere imbeciles; while, on the other hand, men of the most splendid genius have never been able to attain more than a mediocrity of skill. Early instruction—constant practice, limited to one single object—a mechanical memory for combination, strengthened by exercise—and that *peculiar turn* for play which is so much more powerfully developed in some men than in others—these are the sources of the science of Chess, but which are, however, no indication of other talents. Nevertheless,

like Montaigne, I do not rank Chess as a *puerile game*; it is an agreeable pastime, and by exercising the intellectual powers in the combination of ideas, barren it is true, will form the mind of youth to early habits of reflection and induction, that will prepare it for other combinations of the highest importance in the great game of life.

Chess, it is generally asserted, bears a striking analogy, to the science of war, and, as a corollary it follows that a great general must be a great chess player. The latter is not borne out by historical fact. Gustavus Adolphus, Charles the Twelfth, Napoleon, and a host of other distinguished warriors, were but indifferent chess players. Neither does Chess bear the analogy to war which is so generally supposed. Strategically speaking, I grant there may be some identity of principles; but tactically speaking, it does not exist; and the reason is obvious—in actual operations in the field, locality plays a distinguished part—a field of battle generally presenting every variety of ground, while the chess-board is marked by the greatest uniformity of configuration. To obviate, in fact, this defect, it is that tacticians have long felt the desideratum of a game which should present a more faithful image of war, and afford an opportunity of combining the action of the three arms, and of making the application of their evolutions to every variety of ground. With this view, a game (*Jeu de la Guerre*) was invented about the beginning of the present century by a Swiss, to which the celebrated Massena for a time devoted considerable attention. But a still more complete game, the Kreiggs Spiele, was invented a few years ago by a Prussian officer of artillery, which caused at the time considerable sensation in the military circles on the Continent.

The apparatus of the game may be seen in the arsenal at Berlin. It illustrates with the greatest fidelity the operations of the three arms in the field, and is furnished with plans of ground exhibiting every local feature by which tactical movements are effected, and also with marks according to the scale of the plan, shewing the actual space which the bodies of troops they represent would occupy, whether in line or *en masse*. The "materiel" of the game consists in small rectangular figures, various in size, according to the strength of the force they represent, from sections of men to even single files, and single pieces of ordnance to masses of six battalions with their batteries. There are also scales shewing the ranges of musketry and artillery either with grape or round shot. Plans of the battles of Ligny, Dresden, the Kalsback, Quatre Bras, and other celebrated fields, have been expressly lithographed for this game, exhibiting every gradation of slope, and at different intervals. The game is played by two persons and presided by an umpire, and is now very generally cultivated in the armies of Russia and Prussia.

Chess, from time immemorial, was known in Hindostan by the name of *Chaturanga*, or the four members of an army (*elephants, horsemen, chariots, and foot-soldiers*) ; afterwards in Persia, styled *Chatrang* (*the game of king*) ; and *Shatranj* (*the king's distress*) by the Arabians ; undergoing various other changes in different languages, ultimately formed the English appellation of Chess. It is played on a board with thirty-two pieces of different forms, denominations, and powers, divided into two colours or parties.

CHESS MEN.



Rook. Knight. Bishop. King. Queen. Pawn.

THE CHESS BOARD.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64

The chess-board, like the draught-table, contains sixty-four squares, chequered black and white. The king and his officers, being eight pieces, are ranged at different ends upon the first lines of the board, a white corner of which, numbered 1, is to be placed towards the right-hand of one player, and the other white corner opposite diagonally, numbered 64, towards the right hand of the adversary.

The white king must be upon the fourth, a

black square (marked 61), at one end of the board reckoning from the right; the black or red king upon the fifth (5), a white square, at the other end of the board; opposite to each other. The white queen must be upon the fifth (60), a white square, on the left of her king. The black queen upon the fourth (4), a black square on the right of her king. The bishops must be placed on each side of their king and queen; 59 and 62 for the white, 3 and 6 for the black. The knights on each side of the bishops: the white on 58 and 63, the black on 2 and 7. The rooks, in the two corners of the board, next to the knights, 57 and 46 of the white, 1 and 8 of the black: and the eight pawns, or common men, upon the eight squares of the second line; the white on 49 to 56, and the black on 9 to 16 inclusive.

The pieces, and pawns, on the side of each king, take their names from him, as those on the side of the queen do from her, and are called the black or white king's bishop (6 and 62); the king's knights (7 and 63); the king's rooks (8 and 64); the king's pawns (13 and 53); the king's bishop's pawns (14 and 54); the king's knight's pawns (15 and 55); the king's rook's pawns (16 and 56); the black or white queen's bishops (3 and 59); the queen's knights (2 and 58); the queen's rooks (1 and 57); the queen's pawns (12 and 52); the queen's bishop's pawns (11 and 51); the queen's knight's pawns (10 and 50); and the queen's rook's pawns (9 and 49). The squares are named from the pieces, *viz.* where the king stands, is called the square of the king; where his pawn stands is called the second square of the king: that before the pawn is called the third square of the king; that beyond it is called the fourth square of the king; and so of all the rest.

The kings (styled *Chah* by the Orientals) move every way, but only one square at a time (except in the case of castling), and must always be at least one square distant from each other. Suppose the king placed on No. 37, he may be moved from thence to 28, 29, 30, 36, 38, 44, 45, or 46. The king may leap once in the game, either on his own side, or on the side of his queen, in which case the rook is moved into the next square to the king, and the king moves to the square on the other side of him, which is also called castling; but he cannot do so, if there be a piece between him and the rook; nor after this rook has been played; nor after the king has been moved; nor when the king is in check; nor when the square over which he means to leap is viewed by an adverse man, who would check him in his passage.

The black king castles on his own side, by moving from 5 to 7, and placing the rook (8) on 6; on his queen's side, by moving to 3, and placing the rook (1) on 4. The white king castles on his own side, by moving from 61 to 63, and placing the rook (64) on 62; on his queen's side, by moving to 59, and placing the rook (57) on 60.

The queen (originally *pherz, general*) possesses the moves and powers of the rook, and bishop, in a straight line, and also angularly. *The queen may be moved from 37 to 1, 5, 16, 33, 40, 58, 61, 64, or any intermediate squares in those directions.*

The bishops (formerly *fil, an elephant*) move only angularly, backward or forward, in the same colour as each are at first placed, but can take at any distance when the road is open. *As from 36, the bishop may be moved to 8, 9, 57, or 63, and from 37 to 1, 16, 58, or 64, or any of the intervening squares.*

The knights (horse-soldiers) move obliquely

backward or forward, upon every third square, including that which they stood on, from black to white, and from white to black, over the heads of the men, which no other is allowed to do : as for instance, *from 36 a knight may move to 19, 21, 26, 30, 42, 46, 51, 53, passing over any pieces on 28, 35, 37, or 44 ; and from 37, the knight can be moved to 20, 22, 27, 31, 43, 47, 52, 54, passing over any thing placed on 29, 36, 38, or 45.*

The rooks (*at first rat'h, an armed chariot, afterwards rokh, an hero*) move in a right line, either forward, backward, or sideways, through the whole file, can stop at any square, and take at any distance, when no other piece intervenes.

A rook placed on 37 may be moved to 5, 33, 40, 61, or any intermediate square.

A pawn (*pedone, foot-soldier*) moves one square at a time, in a straight line forward, and takes the enemy angularly. He may be moved two squares the first move, but never backward, and is prohibited from quitting his own file, except in case of making a capture, when he is moved into the place of the captive, and afterwards advances forward in that file. *If a white pawn be placed on 37, and a black on 28, either of them could take the other ; but suppose the white pawn on 37, a black rook on 29, a black bishop on 28, and a black knight on 30, the pawn then could not take the rook, but might take either the bishop or the knight.*

If the square over which any pawn leaps be viewed by an adversary, that man may take the pawn, and then must be placed in the square over which the pawn has leaped. A pawn, getting to the head of the board upon the first line of the enemy (styled going to queen), may be changed for any one of the pieces lost in the course of the

game, and the piece chosen must be placed on the square at which the pawn had arrived.

The men take the adversaries who stand in their way, provided the road lies open; or they may decline it, and must be set down in the same squares from which the contrary men are taken. *If the white queen be on 60, and a black knight on 46, the queen can take the knight, which then is to be moved off the board and the queen placed on 46; but if the knight be on 45, then the queen cannot take him, though he can take the queen, who then must be removed, and the knight placed on 60; or suppose a white rook on 61, and a black bishop on 13, the rook can take the bishop, and afterwards is to be placed on 13.*

When the adversary's king is in a situation to be taken by you, you must say *check*, to him: by which you warn him to defend himself, either by changing his place, or by covering himself with one of his own men, or by taking the man who assaults him; if he can do none of these things, he is *check-mated* (*chamat, the king is dead*) and loses the game. The king cannot change his square, if he by so doing go into check; and when he has no man to play, and is not in check, yet is so blocked up, that he cannot move without going into check, this position is called a *stale-mate*, and in this case the king, who is stale-mated, wins the game in England, but in France this situation makes a drawn game. *Place the black king on 33, with pawns on 30 and 39; the white king on 44, a white bishop on 34, with pawns on 38 and 47; if the white king be moved to 35, black wins the game by a stale-mate, because the black king cannot be moved to 25 or 41, on account of the white bishop; nor to 26, 34, or 42, owing to the white king, as it is requisite that the kings should always be at least one*

square distant from each other ; neither can the black pawns be moved, their progress being stopped by the white.

Many chess players give notice when the queen is in danger of being taken, by saying *check to the queen.*

Several variations have at different periods been introduced into chess. In some of the eastern games the power of the pherz or minister (the piece we call queen) was very limited, being allowed only to move from square to square, and never to be further than two from the king. Tamerlane the Great did not think it beneath him to invent new pieces, which rendered the game more complicated, but after his death they were disused. *Chatúrájè*, or the four kings, is a Persian game by four players, on sixty-four squares, with each eight chess-men, distinguished by white, black, red, and green.* The Chinese introduced other pieces to imitate cannon. Carrera added two, the campione, and the centaur, with two other pawns, and increased the squares to eighty. *Arch-chess* was played on a board with one hundred squares, besides two new pieces, styled the centurion and decurion, and two pawns additional on each side. The *Duke of Rutland's game* consisted of one hundred and forty squares, with fourteen pieces and fourteen pawns on each side, one of which was named the concubine, and another the crowned rook. The *round game* was played on a round board, divided into sixty-four parts, of four circles. The *German military game*, on one hundred and twenty-one squares, had on each side a king, two guards, two cuirassiers, two dragoons, two

* *Vide Père Loubere's Voyage du Siam, and the Portuguese Jesuits Vasconcello's "Memorias da China."*

hussars, five cannon, and eleven fusileers. The *king and pawn's game* was merely a curious variation from the common method; where the king and pawns on one side were opposed to the king, pieces and pawns on the other, in which the player, with the king and pawns only, was almost certain of winning.

The Germans sometimes play a double game, with two boards by four people, two of a side, each not only playing his own game, but also assisting his partner. The Russians, in addition to other moves, give that of the knight to the queen; they likewise play four persons at a time, two against two, on a board larger than usual, containing more squares, and a greater number of men. Euler shows a method of covering with the knight all the squares of the board in sixty-four moves. Place the knight on No. 8, and from thence in the following order: 23, 40, 55, 61, 51, 57, 42, 25, 10, 4, 14, 24, 39, 56, 62, 52, 58, 41, 26, 9, 3, 13, 7, 22, 32, 47, 64, 54, 60, 50, 33, 18, 1, 11, 5, 15, 21, 6, 16, 31, 48, 63, 53, 59, 49, 34, 17, 2, 12, 27, 44, 38, 28, 43, 37, 20, 35, 45, 30, 36, 19, 29, 46.

The board is technically called the exchequer, the squares are styled houses, the ranges of which in a straight line, from right to left, are denominated ranks, and perpendicularly, from one player to the other, files.

EXAMPLES OF VARIOUS MATES.

1. QUEEN'S mate: *white king* 27, *queen* 26; *black king* 25; or *white king* 22, *queen* 15, and *black king* 8.

2. Bishop's mate; *white king* 24, *bishops* 21 and 22; *black king* 8.

3. Knight's mate; *white king* 26, *knight* 19; *black king* 9, *bishop* 1, *knight* 10.

4. Rook's mate; *white king* 27, *rook* 41; *black king* 25.

5. Pawn's mate; *white king* 14, *pawn* 15; *black king* 8, *pawn* 16.

6. Mate by discovery; *white king* 11, *rook* 57; *bishop* 49; *black king* 9; *moving the bishop gives mate by discovery.*

7. Smothered mate; *white king* 61, *knight* 14; *black king* 8, *rook* 7, *pawns* 15 and 16.

8. Stale mate; *white king* 21, *pawn* 13; *black king* 5; or *white king* 18, *queen* 19; *black king* 2. See page 327.

9. Mate in the middle of the board; *white king* 61, *queen* 37, *pawn* 44; *black king* 29, *queen* 22, *pawn* 20.

10. Fool's mate :

WHITE.	BLACK.
1. Pawn.... 55 to 39	1. Pawn.... 13 to 21
2. Pawn.... 54 to 46	2. Queen... 4 to 40†

11. Scholar's mate :

1. Pawn.... 53 to 37	1. Pawn.... 13 to 29
2. Bishop.. 62 to 35	2. Bishop.. 6 to 27
3. Queen... 60 to 32	3. Pawn.... 12 to 20
4. Queen... 32 to 14*†	

12. Speedy check mate :

1. Pawn.... 53 to 37	1. Pawn.... 13 to 29
2. Pawn.... 52 to 44	2. Pawn.... 15 to 23
3. Knight.. 63 to 46	3. Pawn.... 14 to 30
4. Pawn.... 37 to 30*	4. Pawn.... 23 to 30*
5. Knight.. 46 to 29*	5. Pawn.... 12 to 20
6. Queen... 60 to 32†	6. King.... 5 to 13
7. Queen ...32 to 14†	

† Signifies that check-mate is given, + that check is given, and * that a man is taken by that move.

13. Difficult check-mates are a knight and bishop, or two bishops against a king ; a rook and bishop against a rook, and a queen against a bishop and knight.

MR. HOYLE'S RULES FOR CHESS.

1. Move your pawns before your pieces, and afterwards bring out the pieces to support them ; therefore the king's, queen's, and bishop's pawns should be the first played, in order to open the game well.

2. Do not, therefore, play out any of your pieces early in the game, because you thereby lose moves, in case your adversary can, by playing a pawn, make them retire, and he also opens his game at the same time : especially avoid playing your queen out, till your game is tolerably well opened.

3. Avoid giving useless checks, and never give any unless to gain some advantage, because you may lose the move, if the adversary can either take or drive your piece away.

4. Never crowd your game by having too many pieces together, so as to prevent your men advancing or retreating as occasion may require.

5. If your game should be crowded, endeavour to free it by exchanges of pieces or pawns, and castle your king as soon as convenient ; afterwards bring out your pieces, and attack the adversary where weakest.

6. When the adversary plays out his pieces before his pawns, attack them as soon as you can with your pawns, by which you may crowd his game, and make him lose moves.

7. Never attack the adversary's king without a sufficient force ; and if he attack yours, and you

cannot retaliate, offer exchanges ; and should he retire, when you present a piece to exchange, he may lose a move. It also may sometimes be expedient to act in this manner in case of other attacks.

8. Play your men in guard of one another, so that if any be taken, the enemy may also be captured by that which guarded yours, and endeavour to have as many guards to your piece as your adversary advances others upon it ; and if possible, let them be of less value than those he assails with. When you cannot well support your piece, see if by attacking one of his that is better, or as good, you may not thereby save yours.

9. Never attack but when well prepared, for thereby you open your adversary's game, and prepare him to pour in a strong attack upon you, as soon as your weak one is over.

10. Never play till you have examined whether you are free from danger by your adversary's last move ; nor offer to attack till you have considered what harm he would be able to do you by his next moves, in consequence of yours.

11. When your attack is in a prosperous way, never be diverted from it by taking any piece, or other seeming advantage, your adversary may purposely throw in your way, with the intent that, by your taking the bait, he might gain a move which would make your design miscarry.

12. When, in pursuing a well-laid attack, you find it necessary to force your adversary's defence, with the loss of some pieces ; if, upon counting as many moves forward as you can, you find a prospect of success, sacrifice a piece or two to gain your end : these bold attempts make the finest games.

13. Never let your queen stand so before the

king, as that your adversary, by bringing forwards a rook or a bishop, might check your king if she were not there, for you could hardly save her, or perhaps at best must sacrifice her for an inferior piece ; *as for example : place the white king on 61, the queen on 53 ; the black king on 4, and the rook, on 16 ; which last, if moved to 13, must be taken by the white queen, who in return would be taken by the black king, because the white queen could not otherwise be moved without putting the king on check to the black rook.*

14. Let not your adversary's knight fork your king and queen, or king and rook, or queen and rook, or your two rooks, at the same time ; for in the two first cases, the king being forced to go out of check, the queen or the rook must be lost ; and in the two last a rook must be lost, at best, for a worse piece. *Place the white queen on 5, the rook on 7, and a black knight on 37. The latter piece, if moved to 22, will fork both the queen and rook, and consequently one of them must be lost for the knight.*

15. Take care that no guarded pawn of your adversary's fork two of your pieces : knights and rooks are particularly liable to this mode of attack ; also guard against either a check by discovery, or a stale-mate.

16. When the kings have castled on different sides of the board, attack with the pawn you have on that side where the adversary has castled, advancing the pieces, especially the queen and rooks to support them ; and if the adversary's king have three pawns on a line in front, he should not stir them till forced to it.

17. Endeavour to have a move in ambuscade ; that is, place the queen, bishop, or rook behind a pawn, or a piece, in such a manner, as that, upon

playing that pawn, or piece, you discover a check upon your adversary's king, and consequently may often get a piece, or some other advantage by it. *Suppose the black king on 6, a white bishop on 41, and a pawn on 34; by moving the pawn to 26, a check by the white bishop is discovered upon the black king.*

18. Never guard an inferior piece or pawn with a better, if you can do it with a pawn, because that better piece may in such a case be, as it were, out of play.

19. A pawn pushed on, and well supported, often costs the adversary a piece; but one separated from the others is seldom of any value. And whenever you have gained a pawn, or other advantage, and are not in danger of losing the move thereby, make as frequent exchanges as you can.

20. If each player have three pawns upon the board, and no piece, and you have a pawn on one side of the board, and the other two on the other side, and your adversary's three are opposite to your two, march with your king to take his pawns; and if he move to support them, go on to queen with your single pawn; and if he attempt to hinder it, take his pawns, and push yours to queen; that is, to move a pawn into the adversary's back row, in order to make a queen, when the original is lost.

21. At the latter end of the game, each party having only three or four pawns on different sides of the board, the kings are to endeavour to gain the move, in order to win the game: *For example: the white king placed on 54, and the black king on 37, white would gain the move by playing to 53, or black to 38, and in both cases the adverse king would be prevented from advancing.*

22. When the adversary has no more than his king and one pawn on the board, and you a king only, you can never lose that game if you bring and keep your king opposite to your adversary's, when he is immediately either before or on one side of his pawn, and only one house between the kings. This must then either be a drawn game, or if the opponent persist in his endeavours to win, he will lose by a stale-mate, by drawing you upon the last square.

23. When your adversary has one pawn on the rook's line, with a king and bishop against a king only, and his bishop is not of the colour that commands the corner-house his pawn is going to, if you can get your king into that corner, you cannot lose that game, but may win by a stale-mate.

24. When you have only your queen left in play, and your king happens to be in the position of stale-mate, keep giving check to your adversary's king, always taking care not to check him where he can interpose any of his pieces that make the stale : by so doing, you will at last force him to take your queen, and then you win the game, by being in stale-mate.

25. Never cover a check with a piece that a pawn pushed upon it may take, for fear of only getting that pawn for it: *put a black rook on 7, and a pawn on 40; the white king on 68, and a knight on 61: the white king being on check to the rook, if the check be covered by moving the white knight to 56, the black pawn could then be moved to 48, and take the knight.*

26. Do not crowd your adversary's king with your pieces, lest you inadvertently give a stale-mate.

27. Do not be too much afraid of losing a rook for an inferior piece; though a rook is better than

any other, except the queen, yet it seldom comes into play, so as to operate, until the end of the game; and it is generally better to have a worse piece in play than a superior out.

28. When you have moved a piece, which your adversary drives away with a pawn, that is a bad move, your enemy gaining a double advantage. At this nice game no move can be indifferent. Though the first move may not be much, between equally good players, yet the loss of one or two more, after the first, makes the game almost irretrievable; but if you can recover the move, or the attack (for they both go together), you are in a fair way of winning.

29. If ever your game be such, that you have scarce any thing to play, you have either brought out your pieces wrong, or, which is worse, not at all; for if you have brought them out right, you must have variety enough.

30. Do not be much afraid of doubling a pawn: two in a direct line are not disadvantageous when surrounded by three or four others; three together are strong (*as three white pawns on 28, 35, and 37*); but four (*as 44 in addition*) that make a square, with the help of other pieces, well managed, form an invincible strength, and probably may produce you a queen: on the contrary, two pawns, with an interval between (*as on 35 and 37*) are no better than one; and if you should have three over each other in a line (*as 26, 34, and 42*), your game cannot be in a worse situation.

31. When a piece is so attacked that it is difficult to save it, give it up, and endeavour to annoy your enemy in another place; for it often happens, that whilst your adversary is pursuing a piece, you either get a pawn or two, or such a situation as ends in his destruction.

32. Supposing your queen and another piece are attacked at the same time, and by removing your queen, you must lose the piece, if you can get two pieces in exchange for her, rather do that than retire; for the difference is more than the worth of a queen; besides, you preserve your situation, which often is better than a piece; when the attack and defence are thoroughly formed, if he who plays first be obliged to retire by the person who defends, that generally ends in the loss of the game on the side of him who attacks.

33. Do not aim at exchanges without reason; a good player will take advantage of it, to spoil your situation, and mend his own: but when you are strongest, especially by a piece, and have not an immediate check-mate in view, then every time you exchange, your advantage increases. Again, when you have played a piece, and your adversary opposes one to you, exchange directly, for he wants to remove you: prevent him, and do not lose the move.

34. Every now and then examine your game, and then take your measures accordingly.

35. At the latter end of the game, especially when both queens are off the board, the kings are capital pieces; do not let your king be idle; it is by his means, generally, you must get the move and the victory.

36. As the queen, rooks, and bishops operate at a distance, it is not always necessary in your attack to have them near your adversary's king, they do better at a distance, cannot be driven away, and prevent a stale-mate.

37. When there is a piece you can take, and that cannot escape, do not hurry; see where you

can make a good move elsewhere, and take the piece at leisure.

38. It is not always right to take your adversary's pawn with your king, for very often it happens to be a safeguard and protection to him.—*Place a black rook on 5, with a pawn on 45, and the white king on 53, and he will be sheltered by the black pawn from the attack of the rook.*

39. When you can take a man with different pieces, consider thoroughly with which you had best take it.

MAXIMS FOR THE CONCLUSIONS OF GAMES.

1. A single pawn cannot win if the adversary's king be opposed to it; *as, put the white king on 30, with a pawn on 22, and the black king on 14, either side having the move, it must be a drawn game, or black wins by a stale-mate*; but if its own king be placed before it, then the pawn may win; *as, reverse the situations of the kings by putting white on 14, and black on 30; black cannot hinder the white pawn from making a queen.*

2. Two pawns against one must win in most cases; but the player possessing the two should avoid exchanging one of them for his adversary's pawn.

3. A pawn with any piece, must win in every case, except with a bishop, when the pawn is on a rook's file, and the bishop does not command the square where the pawn must go to queen; *as, the white king on 39, with a bishop on 30, and a pawn on 24; and the black king on 6; black can prevent the pawn from pushing on to queen, which could not be prevented if the white bishop were on 29.*

4. Two knights, without any other man, cannot give check-mate.

5. Two bishops may win.
6. A knight with a bishop may win.
7. A rook against either a knight or a bishop makes a drawn game; as also do a rook and a knight against a rook.
8. A rook with a bishop against a rook may win.
9. A rook with either a bishop or a knight against a queen makes a drawn game.
10. A queen against a bishop and a knight may win.
11. A queen against a rook with two pawns makes a drawn game.
12. A rook against either a bishop or a knight with two pawns makes a drawn game; because the player possessing the rook cannot be prevented from exchanging it for the two pawns.

In order to determine what shall be a drawn game, it is customary towards the conclusion to fix 50 more moves on each side as the number to ascertain that point.

LAWS OF CHESS.

1. If you touch your man you must play it, unless that would expose your king to check, in which case you are only, when possible, to move the king: and so long as you keep hold, you may place the man where you please; but once having quitted it, you cannot recall the move; though should any men be displaced by accident they are to be restored.

2. If you touch one of your adversary's men, he may insist upon your taking it; and when you cannot do so, then you are to move your king, provided that may be effected without putting him on check.

3. If by mistake, or otherwise, you make a false move, the opponent can oblige you to move the king (as in the 2d article); but if he play without noticing the false move, neither of you can afterwards recal it.

4. If you misplace your men, and play two moves, it lies in your adversary's power whether he will permit you to begin the game afresh.

5. When the adversary gives check without warning, you are not obliged to notice it until he does; but if on his next move he should warn you, each party must then retract his last move, and the king be removed off check.

6. Should the opponent warn you of a check without really giving it, and you have even moved your king, or any other man, you are in such case allowed to retract before the opponent has completed his next move.

7. You are not to give check to your adversary's king by any piece, which by so moving would discover check on your king.*

5. After your king or the rook has moved, you cannot castle; and if you attempt it, the adversary may insist that you move either the king or rook.

9. Every fresh game, the players have the first move alternately; but when the advantage of a piece or pawn is given, the player giving that advantage is entitled to the first move.

* Place the white king on 53, the queen on 19, the black king on 22, with a knight on 21: black must not check the white king by moving the knight to 36; as by that, the black king would be on check to the white queen.

PHILIDOR'S SELECT GAMES AT CHESS.

GAME THE FIRST.

Beginning with white. Illustrated by observations on the most material moves; and two back games; one commencing at the 12th, and the second at the 37th move.

- 1 W. The king's pawn two steps.
B. The same.
- 2 W. The king's bishop at his queen's bishop's fourth square.
B. The same.
- 3 W. The queen's bishop's pawn one move.
B. The king's knight at his bishop's third square.
- 4 W. The queen's pawn two moves.*
B. The pawn takes it.
- 5 W. The pawn retakes the pawn.†
B. The king's bishop at his queen's knight's third square.‡

* This pawn is played two moves for important reasons: 1st, to prevent the adversary's king's bishop from playing upon your king's bishop's pawn; 2d, to put the strength of your pawns in the middle of the exchequer; of great consequence to attain the making a queen.

† When the game is in this situation (namely, one of your pawns at your king's, and another at your queen's fourth square), push neither of them before your adversary proposes to change one for the other; in that case advance the attacked pawn, Pawns, when sustained in a front line, obstruct very much the adversary's pieces from entering in your game, or taking an advantageous post.

‡ If, instead of withdrawing his bishop, he should give check with it, you are to cover the check with your bishop, in order to

- 6 W. The queen's knight at his bishop's third square.
 B. The king castles.
- 7 W. The king's knight at his king's second square.*
 B. The queen's bishop's pawn one move.
- 8 W. The king's bishop at his queen's third square.†
 B. The queen's pawn two moves.
- 9 W. The king's pawn one move.
 B. The king's knight at his king's square.
- 10 W. The queen's bishop at his king's third square.
 B. The king's bishop's pawn one move.‡
- 11 W. The queen at her second square.§

retake his bishop with your knight, in case he take yours; your knight will then defend your king's pawn, otherwise unguarded. But perhaps he may not take your bishop, because a good player strives to keep his king's bishop as long as possible.

* You should not play your knight at your bishop's third square before the bishop's pawn has moved two steps, because the knight hinders the motion of the pawn.

† Your bishop retires to avoid being attacked by the black queen's pawn, which would force you to take that pawn with yours, and very much diminish the strength of your game, spoiling entirely the project already mentioned, in the first and second observation.

‡ He plays this to give an opening to his king's rook; which cannot be prevented, whether you take his pawn or not.

§ If you should take the pawn, instead of playing your queen, you would commit a great fault, because your royal pawn would then lose its line; whereas if the adversary take your king's pawn, that of your queen supplies the place, and you may sustain it with that of your king's bishop's; these two pawns will undoubtedly win the game, because they can now no more be separated without the loss of a piece, or one of them will make a queen, as will be seen by the sequel. Moreover, it is of no little consequence to play your queen in that place, for two reasons: to support and defend your king's bishop's pawn; and to sustain your queen's bishop, which, being taken, would oblige you to

- B. The king's bishop's pawn takes the pawn.*
12 W. The queen's pawn retakes it.
 B. The queen's bishop at his king's third square.†
13 W. The king's knight at his king's bishop's fourth square.‡
 B. The queen at her king's second square.
14 W. The queen's bishop takes the black bishop.§
 B. The pawn takes the white queen's bishop.
15 W. The king castles with his rook.||
-

retake his bishop with the above-mentioned last pawn; and thus your best pawns would have been totally divided, and the game indubitably lost.

* He takes the pawn to pursue his project, which is, to give an opening to his king's rook.

† He plays this bishop to protect his queen's pawn, with a view afterwards to push that of his queen's bishop.

N.B. He might have taken your bishop without prejudice, but he chooses rather to let you take his, in order to get an opening for his queen's rook, though his knight's pawn is doubled by it; you are again to observe, that a double pawn is no way disadvantageous when surrounded by three or four others. However, this is the subject of a back-game, beginning from the 12th move; the black bishop there taking your bishop, shows, that, playing well on both sides, it will make no alteration in the case. The king's pawn, together with the queen's or the king's bishop's pawn, well played, and well sustained, will certainly win the game.

‡ Your king's pawn being in no danger, your knight attacks his bishop in order to take or have it removed.

§ It is always dangerous to let the adversary's king's bishop batter the line of your king's bishop's pawn; and as it is likewise the most dangerous piece to form an attack, it is not only necessary to oppose him at times by your queen's bishop, but you must get rid of that piece as soon as a convenient occasion offers.

|| Castle on the king's side, in order to strengthen and protect your king's bishop's pawn, which advances two steps as soon as your king's pawn is attacked.

- B. The queen's knight at his queen's second square.
- 16 W. The knight takes the black bishop.
B. The queen takes the knight.
- 17 W. The king's bishop's pawn two steps.
B. The king's knight at his queen's bishop's second square.
- 18 W. The queen's rook at his king's place.
B. The king's knight's pawn one move.*
- 19 W. The king's rook's pawn one move.†
B. The queen's pawn one move.
- 20 W. The knight at his king's fourth square.
B. The king's rook's pawn one move.‡
- 21 W. The queen's knight's pawn one move.
B. The queen's rook's pawn one move.
- 22 W. The king's knight's pawn two steps.
B. The king's knight at his queen's fourth square.
- 23 W. The knight at his king's knight's third square.§
B. The king's knight at the white king's third square.||
- 24 W. The queen's rook takes the knight.
B. The pawn takes the rook.
- 25 W. The queen takes the pawn.

* He is compelled to play this pawn, to prevent you from pushing your king's bishop's pawn upon his queen.

† This move is played to unite all your pawns together, and push them afterwards with vigour.

‡ He plays this pawn to prevent your knight from entering in his game, and forcing his queen to remove; otherwise, your pawns would have an open field.

§ Play this knight in order to push your king's bishop's pawn next; it will be then supported by three pieces—the bishop, the rook, and the knight.

|| He plays this knight to obstruct your scheme by breaking the strength of your pawns, by pushing his king's knight's pawn; but break his design by changing your rook for his knight.

- B. The queen's rook takes the pawn of the opposite rook.
- 26 W. The rook at his king's place.*
 B. The queen takes the white queen's knight's pawn.
- 27 W. The queen at her king's fourth square.
 B. The queen at her king's third square.†
- 28 W. The king's bishop pawn one move.
 B. The pawn takes it.
- 29 W. The pawn takes again.‡
 B. The queen at her fourth square.§
- 30 W. The queen takes the queen.
 B. The pawn takes the queen.
- 31 W. The bishop takes the pawn in his way.
 B. The knight at his third square.
- 32 W. The king's bishop's pawn one move.||
 B. The queen's rook at the white queen's knight's second square.
- 33 W. The bishop at his queen's third square.
 B. The king at his bishop's second square.
- 34 W. The bishop at the black king's bishop's fourth square.
 B. The knight at the white queen's bishop's fourth square.

* Play your rook to protect your king's pawn, which would otherwise remain in the lurch as soon as you push your king's bishop's pawn.

† The queen returns to prevent the check-mate.

‡ Were you not to take with your pawn, you would run the risk of losing the game.

§ He offers to change queens, in order to destroy your plan of giving him check-mate with your queen and bishop.

|| N. B. When your bishop runs upon white, strive to put your pawn always upon black, because then your bishop serves to drive away your adversary's king or rook when between your pawns; the same when your bishop runs upon black, then have your pawns upon white.

- 35 W. The knight at the black king's rook's fourth square.
 B. The king's rook gives check.
- 36 W. The bishop covers the check.
 B. The knight at the white queen's second square.
- 37 W. The king pawn gives check.
 B. The knight at the knight's third square.*
- 38 W. The king's bishop's pawn one move.
 B. The rook at its king's bishop's square.
- 39 W. The knight gives check at the fourth aquare of his king's bishop.
 B. The king at his knight's second square.
- 40 W. The bishop at the black king's rook's fourth square.
 B. Plays any where, the white pushes to queen.

FIRST BACK-GAME ;

Or, continuation from the twelfth move.

- 12 W. The queen's pawn retakes it.
 B. The king's bishop takes the white queen's bishop.
- 13 W. The queen takes the bishop.
 B. The queen's bishop at his king's third square.
- 14 W. The king's knight at his king's bishop's fourth square.
 B. The queen at her king's second square.
- 15 W. The knight takes the bishop.
 B. The queen takes the knight.
- 16 W. The king castles his rook.
 B. The queen's knight at his queen's second square.

* As the king may retire to his bishop's square, the second back-game will show how to proceed in this case.

- 17 W. The king's bishop's pawn two moves.
B. The king's knight's pawn one move.
- 18 W. The king's rook's pawn one move.
B. The king's knight at his second square.
- 19 W. The king's knight's pawn two steps.
B. The queen's bishop's pawn one move.
- 20 W. The knight at his king's second square.
B. The queen's pawn one move.
- 21 W. The queen at her second square.
B. The queen's knight at his third square.
- 22 W. The knight at his king's knight's third square.
B. The queen's knight at his queen's fourth square.
- 23 W. The queen's rook at his king's square.
B. The queen's knight at the white king's third square.
- 24 W. The rook takes the knight.
B. The pawn takes the rook.
- 25 W. The queen takes the pawn.
B. The queen takes the white queen's rook's pawn.
- 26 W. The king's bishop's pawn one move.
B. The queen takes the pawn.
- 27 W. The king's bishop's pawn one move.
B. The knight at his king's square.
- 28 W. The king's knight's pawn one move.
B. The queen at the white queen's fourth square.
- 29 W. The queen takes the queen.
B. The pawn takes the queen.
- 30 W. The king's pawn one move.
B. The knight at his queen's third square.
- 31 W. The knight at his king's fourth square.
B. The knight at his king's bishop's fourth square.
- 32 W. The rook takes the knight.

- B. The pawn takes the rook.
 33 W. The knight at the white queen's third square.
 B. The king's bishop's pawn one move anywhere, the game being lost.
 34 W. The king's pawn one move.
 B. The king's rook at his queen's knight's square.
 35 W. The bishop gives check.
 B. The king retires, having but one place.
 36 W. The knight gives check.
 B. The king removes.
 37 W. The knight at the black queen's square discovering check.
 B. The king moves where he can.
 38 W. The king's pawn making a queen, gives check-mate in the meantime.
-

SECOND BACK-GAME.

- Beginning from the thirty-seventh move.*
- 37 W. The king's pawn gives check.
 B. The king at his bishop's square.
 38 W. The rook at its queen's rook's square.
 B. The rook gives check at the white queen's knight's square.
 39 W. The rook takes the rook.
 B. The knight retakes the rook.
 40 W. The king at his rook's second square.
 B. The knight at the white queen's bishop's third square.
 41 W. The knight at his king's bishop's fourth square.
 B. The knight at the white king's fourth square.
 42 W. The knight takes the pawn.

- B. The rook at its king's knight's fourth square.
43 W. The king's pawn one move, and gives check.
 B. The king at his bishop's second square.
44 W. The bishop gives check to the black king's third square.
 B. The king takes the bishop.
45 W. The king's pawn makes a queen, and wins the game.
-

GAME THE SECOND.

Beginning with the black; wherein it appears that playing the king's knight, the second move, is wrong; because it gives the attack to the adversary. By three different back-games it is also shown that a good attack keeps the defender always embarrassed.

- 1** B. The king's pawn two steps.
 W. The same.
2 B. The king's knight at his bishop's third square.
 W. The queen's pawn one move.
3 B. The king's bishop at the queen's bishop's fourth square.
 W. The king's bishop's pawn two moves.*

* Whatever else your adversary might have played, this was always your best move, it being very advantageous to change your king's bishop's pawn for his royal pawn; because your king and queen's pawn place themselves in the middle of the chess board, and become in a situation to stop all the progress of your adversary's pieces; besides this, you gain the attack by his having played his king's knight at the second move. You have still another advantage by losing your king's bishop's pawn for his king's pawn; that is, when you do castle with your king's rook, the same rook finds itself immediately free and fit for action. This will be demonstrated by the first back-game.

- 4 B. The queen's pawn one move.
 W. The queen's bishop's pawn one move.
 5 B. The king's pawn takes the pawn.*
 W. The queen's bishop retakes the pawn.
 6 B. The queen's bishop at the white king's knight's fourth square.
 W. The king's knight at his bishop's third square.†
 7 B. The queen's knight at his queen's second square.
 W. The queen's pawn one move.
 8 B. The bishop retires.
 W. The king's bishop at his queen's third square.‡
 9 B. The queen at her king's second square.
 W. The same.
 10 B. The king castles with his rook.§

* Observe, if he refuse taking your pawn, leave it exposed in the same situation and place; except, however, he should choose to castle with his king's rook, in which case you must, without any hesitation, push that pawn forwards, in order to attack his king with all the pawns of your right wing. The effect will be best learned by a second back-game, beginning from this fifth move. Observe again, as a general rule, not easily to push on the pawns either of your right or left wings before your adversary's king has castled; he will otherwise retire where your pawns are less strong, or less advariced.

† If he take your knight, you must take his with your pawn, which being joined to his comrade's, increases their strength.

‡ This is the best square your king's bishop can choose, except the fourth of his queen's bishop, especially when you have the attack, and it be out of your adversary's power to prevent that bishop playing on his king's bishop's pawn.

§ If he had castled on his queen's side, it would have been then your game to castle on your king's side, in order to attack him more conveniently with your pawns on the left. Do not be too hasty in pushing your pawns forward till they are well sustained both by one another, and also by your pieces. The form of this attack at your left will be best seen by a third back-gaine, beginning from this 10th move.

- W. The queen's knight at his queen's second square.
 11 B. The king's knight at his rook's fourth square.*
 W. The queen at her king's third square.
 12 B. The king's knight takes the bishop.†
 W. The queen retakes the knight.
 13 B. The queen's bishop takes the knight.‡
 W. The pawn retakes the bishop.
 14 B. The king's bishop's pawn two moves.
 W. The queen at her king's knight's third square.
 15 B. The pawn takes the pawn.
 W. The bishop's pawn retakes it.
 16 B. The king's rook at his king's bishop's third square.§
 W. The king's rook's pawn two steps.||
 17 B. The queen's rook at his kings bishop's square.
-

* He plays this knight to make room for his king's bishop's pawn, with a view to advance it two steps, in order to break the chain of your pawns.

† If he had pushed his king's bishop's pawn instead of taking your bishop, you must then have attacked his queen with your queen's bishop, and pushed your king's rook's pawn the next move upon his bishop, to compel him to take your knight; in this case your best way would be to retake his bishop with your pawn, in order to support your royal pawn, and replace it in case it be taken.

‡ If he did not take your knight, his bishop would remain imprisoned by your pawns, or he would lose at least three moves to get him free.

§ He plays this rook with an intention either to double it, or to remove your queen.

|| You push this pawn two steps to give your queen more room, who, being attacked, can retire behind this pawn, and there remain, threatening her adversary's king's rook's pawn. Your pawn advancing afterwards will become dangerous to your adversary's king.

- W. The king castles with his queen's rook.
 18 B. The queen's bishop's pawn two steps.
 W. The king's pawn one step.*
 19 B. The queen's pawn takes the pawn.
 W. The queen's pawn one move.
 20 B. The bishop at his queen's bishop's second square.
 W. The knight at his king's fourth square.†
 21 B. The king's rook at the white king's bishop's third square.
 W. The queen at her king's knight's second square.
-

* This move is as difficult to comprehend as to be well explained. You are to observe, when you find yourself with a chain of pawns following one another upon one and the same coloured squares, the pawn who has the van should not be abandoned, but must strive to keep his post. Here again observe, that your king's pawn being not in the line with his comrades, your adversary has pushed his queen's bishop's pawn two steps, for two reasons; the first to engage you to push that of your queen forwards, which, in this case, would be always stopped by that of his queen, and thus leaving behind that of your king would render it entirely useless. The second is, to prevent your king's bishop from battering his king's rook's pawn; therefore it is best to push your king's pawn upon his rook, and sacrifice it; because then your adversary, by taking it, opens a free passage to your queen's pawn, which you are to advance immediately, and sustain, in case of need, with your other pawns, in order to make a queen with it, or draw some other considerable advantage to win the game. His queen's pawn (now become his king's) appears to have the same advantage of having no opposition from your pawns to make a queen; however, the difference is great, because his pawn being entirely separated from his comrades will always be endangered in his road by a multitude of your pieces all waging war against it.

† It was necessary to play that knight in order to stop his king's pawn, the more because this very pawn, in its present situation, stops the passage of his own bishop, and even of his knight.

- 22 B. The queen at her king's bishop's second square.*
 W. The knight at the black king's knight's fourth square.
- 23 B. The queen gives check.
 W. The king at his queen's knight's square.
- 24 B. The rook takes the bishop.†
 W. The rook retakes the rook.
- 25 B. The queen at her king's bishop's fourth square.
 W. The queen at her king's fourth square.‡
- 26 B. The queen takes the king.
 W. The knight takes the queen.
- 27 B. The rook at the white king's bishop's fourth square.
 W. The king at the black king's knight's fourth square.
- 28 B. The queen's bishop's pawn one move.
 W. The queen's rook at her king's knight's third square.
- 29 B. The knight at his queen's bishop's fourth square.

* He plays his queen in order next to give check: but if he had played his king's rook's pawn to prevent the attack of your knight, you must then have attacked his bishop and his queen with your queen's pawn; and in such a case he would have been forced to take your pawn, and you should have retaken his bishop with your knight, which he could not have taken with his queen, because she would have been lost by a discovered check with your bishop.

† He takes your king's bishop; first, to save his king's rook's pawn, and because your bishop proves more incommodious to him than any other of your pieces; and secondly, to put his queen upon the rook that covers your king.

‡ Having the advantage of a rook against a bishop at the end of a game, it is your advantage to change queens: because his queen being at present troublesome in the post where he just played her, you force him to change, which he cannot avoid, if he will save his being check-mated.

- W. The knight at the black king's third square.
 30 B. The knight takes the knight.
 W. The pawn retakes the knight.
 31 B. The rook at his king's bishop's third square.
 W. The king's rook at its queen's square.
 32 B. The rook takes the pawn.
 W. The king's rook at the black queen's second square, and must win the game.*
-

FIRST BACK-GAME ;

Beginning at the third move.

- 3 B. THE queen's pawn two steps.
 W. The king's bishop's pawn two steps.
 4 B. The queen's pawn takes the pawn.†
 W. The king's bishop's pawn retakes the pawn.
 5 B. The king's knight at the white king's knight's fourth square.
 W. The queen's pawn one step.
 6 B. The king's bishop's pawn two steps.
 W. The king's bishop at his queen's bishop's fourth square.
 7 B. The queen's bishop's pawn two steps.
 W. The queen's bishop's pawn one step.
 8 B. The queen's knight at her bishop's third square.
 W. The king's knight at his king's second square.
-

* Any thing he could have played could not prevent you from doubling your rooks, unless he had sacrificed his bishop, or let you make a queen with your pawn; therefore he loses the game every way.

† If he had taken your king's bishop's pawn instead of this, you must have pushed your king's pawn upon his knight, and afterward retaken his pawn with your queen's bishop.

- 9 B. The king's rook's pawn two steps.*
 W. The king's rook's pawn one move.
- 10 B. The king's knight at his rook's third square.
 W. The king castles on his own side.
- 11 B. The queen's knight at her rook's fourth square.
 W. The bishop gives check.
- 12 B. The bishop covers the check.
 W. The bishop takes the black bishop.
- 13 B. The queen takes the bishop.
 W. The queen's pawn one move.
- 14 B. The queen's bishop's pawn one move.†
 W. The queen's knight's dawn two moves.
- 15 B. The queen's bishop's pawn takes it passing by.
 W. The rook's pawn retakes the pawn.
- 16 B. The queen's knight's pawn one move.
 W. The queen's bishop at his king's third square.
- 17 B. The bishop at his king's second square.
 W. The king's knight at his king's bishop's fourth square.‡
- 18 B. The king's knight at his own square.

* He pushes this pawn two steps to avoid having a double pawn upon his king's rook's line, which, by pushing your king's rook's pawn upon his knight, he could not possibly escape, and you, taking it afterwards with your queen's bishop, would have given him a very bad game.

† He plays this to cut the communication of your pawns; but you avoid it by pushing immediately your queen's knight's pawn upon his knight, which move obliges your adversary to take the pawn by the way. This joins your pawns again, and makes them invincible.

‡ This knight gives the mortal blow to this game, because he holds at present all your adversary's pieces in some measure locked up, till you have time to prepare the check-mate.

- W. The king's knight at the black king's knight's third square.
 19 B. The king's rook at its second square.
 W. The king's pawn one move.
 20 B. The queen at her knight's second square.
 W. The queen's pawn one move.
 21 B. The king's bishop at his third square.
 W. The king's rook takes the pawn.
 22 B. The king castles on his queen's side.
 W. The king's rook takes the black queen's knight.
 23 B. The pawn takes the rook.
 W. The queen's rook takes the pawn.
 24 B. The queen's rook's pawn one move.
 W. The rook gives check.
 25 B. The king retires.
 W. The rook at the black queen's bishop's second square.
 26 B. The queen at her knight's fourth square.
 W. The queen's knight at her rook's third square.
 27 B. The queen at her king's bishop's fourth square.
 W. The queen's knight at her bishop's fourth square.
 28 B. The queen takes the knight.
 W. The bishop gives check.
 29 B. The king retires where he can.
 W. The knight gives check-mate.
-

SECOND BACK-GAME ;

Beginning from the fifth move.

- 5 B. THE king castles on his own side.
 W. The king's bishop's pawn one move.
 6 B. The queen's pawn one move.

- W. The queen at her king's bishops third square.
7 B. The queen's pawn takes the pawn.
 W. The queen's pawn retakes the pawn.
8 B. The queen's rook's pawn two moves.
 W. The king's knight's pawn two moves.
9 B. The queen at her third square.
 W. The king's knight's pawn one move.
10 B. The king's knight at his king's square.
 W. The king's bishop at his queen's bishop's fourth square.
11 B. The queen's bishop's pawn one move.
 W. The queen at the black king's rook's fourth square.
12 B. The queen's knight's pawn two steps.
 W. The king's knight's pawn one move.
13 B. The king's rook's pawn one move.
 W. The bishop takes the king's bishop's pawn, and gives check.
14 B. The king at his rook's square.
 W. The queen's bishop takes the black king's rook's pawn.
15 B. The king's knight at his bishop's third square.
 W. The queen being at her king's rook's fifth square, wins the game on removing the bishop.
-

THIRD BACK-GAME.

Beginning from the tenth move.

- 10 B.** The king castles on his queen's side.
 W. The king castles on his own side.
11 B. The king's rook's pawn one move.
 W. The queen's knight at his queen's second square.

- 12 B. The king's knight's pawn two steps.
 W. The queen's bishop at his king's third square.
- 13 B. The queen's rook at its king's knight's square.
 W. The queen's knight's pawn two steps.
- 14 B. The king's rook's pawn one move.
 W. The queen's rook's pawn two moves.*
- 15 B. The bishop takes the knight.
 W. The queen takes the bishop.
- 16 B. The king's knight's pawn one move.
 W. The queen at her king's second square.
- 17 B. The queen's bishop's pawn one step.
 W. The queen's rook's pawn one step.
- 18 B. The bishop at his queen's bishop's second square.
 W. The queen's bishop's pawn one move.
- 19 B. The king's rook's pawn one move.
 W. The king's rook at his queen's knight's square.
- 20 B. The king's rook at its fourth square.
 W. The queen's bishop's pawn one move.
- 21 B. The queen's pawn one move.
 W. The king's pawn one move.
- 22 B. The king's knight at his king's square.
 W. The queen's knight's pawn one move.
- 23 B. The pawn takes the pawn.
 W. The king's rook retakes the pawn.
- 24 B. The queen's rook's pawn one move.

* When the king is behind two or three pawns, and your adversary falls upon them in order to attack your king, you must take care not to push any of those pawns till forced; as it would have been very bad policy to have pushed your king's rook's pawn upon his bishop, because he would then have got the attack by taking your knight with his bishop, and would have got an opening upon your king by pushing his king's knight's pawn, which would have lost you the game.

- W. The king's rook at its queen's knight's fourth square.
 25 B. The king's bishop's pawn one move.
 W. The king's bishop takes the queen's rook's pawn.
 26 B. The pawn takes the bishop.
 W. The queen takes the pawn, and gives check.
 27 B. The king retires.
 W. The queen gives check.
 28 B. The knight covers the check.
 W. The queen's rook's pawn one move.
 29 B. The king at his queen's second square.
 W. The queen takes the queen's pawn, and gives check.
 30 B. The king retires.
 W. The queen's rook's pawn one move, and by different ways wins the game.
-

CUNNINGHAM'S GAMBIT.

The inventor of which thought it a sure game; but three pawns well conducted, for the loss of a bishop only, will win the game, playing well on both sides. There are two back-games: one from the seventh, and the other at the eleventh move.

- 1 W. THE king's pawn two moves.
 B. The same.
- 2 W. The king's bishop's pawn two moves.
 B. The king's pawn takes the pawn.
- 3 W. The king's knight at his king's bishop's third square.
 B. The king's bishop at his king's second square.
- 4 W. The king's bishop at his queen's bishop's fourth square.

- B. The king's bishop gives check.
- 5 W. The king's knight's pawn once move.
B. The pawn takes the pawn.
- 6 W. The king castles on his own side.
B. The pawn takes the rook's pawn and gives check.
- 7 W. The king at his rook's square.
B. The king's bishop at his third square.*
- 8 W. The king's pawn one move.
B. The queen's pawn two steps.
- 9 W. The king's pawn takes the bishop.
B. The king's knight takes the pawn.
- 10 W. The king's bishop at his queen's knight's third square.
B. The queen's bishop at his king's third square.
- 11 W. The queen's pawn one move.†
B. The king's rook's pawn one move.†
- 12 W. The queen's bishop at his king's bishop's fourth square.
B. The queen's bishop's pawn two steps.

* If, instead of playing this bishop at his third square, he had played it at his king's second square, you had won the game in a few moves, which appears by the first back-game.

† Without a sacrifice of this bishop he could not win the game; but, losing it for three pawns, he becomes your conqueror; which three pawns (provided he is not too hasty in pushing them forward, and that they are always well sustained by his pieces) will win the game in spite of your best defence.

‡ If you had pushed this pawn two steps, you had given to his knight a free entry into your game, which would have lost it very soon. But, to make this more evident, see a second back-game from his eleventh move.

§ This move is of great consequence, because it prevents you from attacking his king's knight with your queen's bishop, which would have enabled you to separate his pawns by changing one of your rooks for one of his knights.

- 13 W. The queen's bishop takes the pawn next to his king.
 B. The queen's knight at her bishop's third square.
- 14 W. The queen's knight at his queen's second square.
 B. The king's knight at the white king's knight's fourth square.*
- 15 W. The queen at her king's second square.†
 B. The knight takes the bishop.
- 16 W. The queen takes the knight.
 B. The queen at her knight's square.‡
- 17 W. The queen takes the queen.§
 B. The rook takes the queen.
- 18 W. The queen's rook at its king's square.
 B. The king at his queen's second square.
- 19 W. The king's knight gives check.
 B. The knight takes the knight.
- 20 W. The queen's rook takes the knight.
 B. The king at his queen's third square.
- 21 W. The king's rook at his king's square.

* He plays this knight to take your queen's bishop, which would prove very incommodious to him in case he should castle on his queen's side. Observe again as a general rule, that if the strength of your game consist in pawns, the best way is to take the adversary's bishops, because they can stop the advancing of the pawns much better than the rooks.

† Not being to save your bishop, without doing worse, play your queen to take his place again when taken; for, if you had played it at your king's bishop's fourth square, to prevent the check of his knight, he would have pushed his king's knight's pawn upon your said bishop, and would have won the game immediately.

‡ If he had played his queen any where else, she would have been cramped; therefore he offers to change, that, in case you refuse, he may place her at her third square, where she would be extremely well posted.

§ If you did not take his queen, your game would be still in a worse state.

- B. The queen's knight's pawn two steps.
 22 W. The queen's bishop's pawn one step.
 B. The queen's rook at its king's square.
 23 W. The queen's rook's pawn two steps.
 B. The queen's rook's pawn one step.
 24 W. The knight at his king's bishop's third square.
 B. The king's knight's pawn two steps.
 25 W. The king at his knight's second square.
 B. The king's bishop's pawn one move.*
 26 W. The queen's rook at its king's second square.
 B. The king's rook's pawn one step.
 27 W. The queen's rook's pawn takes the pawn.
 B. The pawn retakes the pawn.
 28 W. The king's rook at its queen's rook's square.
 B. The queen's rook at her home.†
 29 W. The king's rook returns to its king's square.
 B. The bishop at his queen's second square.
 30 W. The queen's pawn one move.
 B. The queen's bishop's pawn one move.
 31 W. The bishop at his queen's bishop's second square.
 B. The king's rook pawn one move.‡
 32 W. The king's rook at his home.

* If he had pushed this pawn two steps, you had gained his queen's pawn, taking it with your bishop. This would have mended your game very much.

† Always strive to hinder the adversary from doubling his rooks, particularly when there is an opening in the game.

‡ He plays this pawn to push afterwards that of his king's knight upon your knight, with a view to force it from his post; but if he had pushed his knight's pawn before he played this, you must have posted your knight at your king's rook's fourth square, and have stopped the progress of all his pawns.

- B. The king's rook at its fourth square.*
 33 W. The queen's knight's pawn one move.
 B. The queen's rook at its king's rook's square.
 34 W. The queen's knight's pawn one move.
 B. The king's knight's pawn one move.
 35 W. The knight at his queen's second square.
 B. The king's rook at its king's knight's fourth square.
 36 W. The king's rook at its king's bishop's square.
 B. The king's knight's pawn one move.
 37 W. The rook takes the pawn, and gives check.
 B. The king at his queen's bishop's second square.
 38 W. The king's rook at the black king's knight third square.
 B. The king roo'ks pawn gives check.
 39 W. The king at his knight's square.
 B. The king's knight's pawn one move.
 40 W. The rook takes the rook.
 B. The rook's pawn gives check.
 41 W. The king takes the knight's pawn.
 B. The rook's pawn makes a queen, and gives check.
 42 W. The king at his bishop's second square.
 B. The rook gives check at its king's bishop's square.
 43 W. The king at his third square.
 B. The queen gives check at the white king's rook's third square.

* If, instead of playing this, he had given check, with his rook's pawn, he would have played ill, and entirely against the instructions given in the observation marked (§) in the first game, p. 349.

- 44 W. The knight covers the check, having no other way.
 B. The queen takes the knight, and afterwards the rook, and gives check-mate in two moves after.
-

FIRST BACK-GAME.

- Beginning at the seventh move of the Gambit.*
- 7 W. The king at his rook's square.
 B. The bishop at his king's second square.
 8 W. The king's bishop takes the pawn, and gives check.
 B. The king takes the bishop.
 9 W. The king's knight at the black king's fourth square, giving double check.
 B. The king at his third square; any where else he loses his queen.
 10 W. The queen gives check at her king's knight's fourth square.
 B. The king takes the knight.
 11 W. The queen gives check at the black king's bishop fourth square.
 B. The king at his queen's third square.
 12 W. The queen gives check-mate at the black queen's fourth square.
-

SEQUEL TO THIS FIRST BACK-GAME;

In case the adversary refuses taking your bishop with his king at the eighth move of this first back game.

- 8 W. The king's bishop takes the pawn, and gives check.
 B. The king at his bishop's square.

- 9 W. The king's knight at the black king's fourth square.
B. The king's knight at his king's bishop's third square.
- 10 W. The king's bishop at his queen's knight's third square.
B. The queen at her king's square.
- 11 W. The king's knight at the black king's bishop's second square.
B. The rook at the king's knight's square.
- 12 W. The king's pawn one move.
B. The queen's pawn two moves.
- 13 W. The pawn takes the knight.
B. The pawn retakes the pawn.
- 14 W. The bishop takes the pawn.
B. The queen's bishop at the white king's knight's fourth square.
- 15 W. The queen at her king's square.
B. The queen's bishop at her king's rook's fourth square.
- 16 W. The queen's pawn two steps.
B. The bishop takes the knight.
- 17 W. The queen's bishop gives check.
B. The rook covers the check.
- 18 W. The knight at his queen's bishop's third square.
B. The bishop takes the bishop.
- 19 W. The knight retakes the bishop.
B. The queen at her king's bishop's second square.
- 20 W. The knight takes the bishop.
B. The queen takes the knight.
- 21 W. The queen takes the queen.
B. The king takes the queen.
- 22 W. The bishop takes the rook, and with the superiority of a rook easily wins the game.

SECOND BACK-GAME.

Beginning at the eleventh move of Cunningham's Gambit.

- 11 W. The queen's pawn two moves.
B. The king's knight at the white king's fourth square.
- 12 W. The queen's bishop at his king's bishop's fourth square.
B. The king's bishop's pawn two moves.
- 13 W. The queen's knight at his queen's second square.*
B. The queen at her king's second square.
- 14 W. The queen's bishop's pawn two moves.
B. The queen's bishop's pawn one move.†
- 15 W. The pawn takes the pawn.
B. The pawn retakes the pawn.
- 16 W. The queen's rook at her bishop's square.
B. The queen's knight at her bishop's third square.
- 17 W. The queen's knight takes the knight.
B. The king's bishop's pawn retakes the knight.
- 18 W. The knight takes the black pawn next to his king.

* This knight is played to tempt your adversary to take it; but if he did, he would play very ill; because a knight thus situated, and sustained by two pawns, whilst you have no pawn left to push up to replace it, that knight is at least worth a rook, and becomes so incommodious that you will be forced to remove it; and in this case your adversary reunites his two pawns, one of which will probably either make a queen, or cost you a piece to prevent the same.

† If he had taken your pawn, his game would have very much diminished in strength, because his knight had then been sustained by one pawn instead of two; besides, he would have been forced to withdraw his king's knight when attacked, in order to preserve the pawn that sustained it.

- B. This king castle with his rook.
19 W. The queen at her second square.
B. The king's rook's pawn one step.
20 W. The queen's rook at the black queen's
bishop's fourth square.
B. The queen's rook at its queen's square.
21 W. The king's bishop at his queen's rook's
fourth square.
B. The king's knight's pawn two steps.
22 W. The queen's bishop at his king's third
square.
B. The rook takes the rook.
23 W. The knight takes the rook.
B. The queen at her third square.
24 W. The queen at her king's rook's second
square.
B. The king at his knight's second square.
25 W. The queen takes the queen.
B. The rook retakes the queen.
26 W. The queen's rook's pawn one move.
B. The king at his knight's third square.
27 W. The queen's knight's pawn two steps.
B. The king's rook's pawn one move.
28 W. The queen's knight's pawn one move.
B. The knight at his king's second square.
29 W. The rook at the black queen's bishop's
second square.
B. The rook at its queen's second square.
30 W. The rook takes the rook; if not, it will be
the same.
B. The bishop retakes the rook.
31 W. The king at his knight's second square.
B. The king's rook's pawn one step.
32 W. The queen's bishop at his king's bishop's
second square.
B. The king at his rook's fourth square.
33 W. The king's bishop gives check.

- B. The bishop covers the check.
 34 W. The bishop takes the bishop.
 B. The king takes the bishop.
 35 W. The knight gives check at his king's third square.
 B. The king at the white king's bishop's fourth square.
 36 W. The king at his rook's third square.
 B. The king at the white king's bishop's third square.
 37 W. The knight at his king's knight's fourth square.
 B. The knight at his king's bishop's fourth square.
 38 W. The bishop at his king's knight's square.
 B. The king's pawn one move.
 39 W. The queen's rook's pawn one move.
 B. The king's pawn one move.
 40 W. The bishop at his king's bishop's second square.
 B. The knight takes the queen's pawn, and afterwards wins the game.
-

FURTHER ILLUSTRATION OF CUNNINGHAM'S GAMBIT.

- 1 W. The king's pawn two moves.
 B. The same.
- 2 W. The king's bishop's pawn two moves.
 B. The pawn takes the pawn.
- 3 W. The king's knight at his bishop's third square.
 B. The king's bishop at his king's second square.
- 4 W. The king's bishop at his queen's bishop's fourth square.

- B. The bishop gives check.
 5 W. The king at his bishop's square.*
 B. The queen's pawn one step.
 6 W. The queen's pawn two steps.
 B. The queen at her king's bishop's third square.
 7 W. The king's pawn one steps.
 B. The queen's pawn takes the pawn.
 8 W. The queen's pawn retakes the pawn.
 B. The queen at her king's second square.
 9 W. The queen's bishop takes the gambit pawn.
 B. The queen's bishop at the white king's knight's fourth square.
 10 W. The queen's knight at her bishop's third square.
 B. The queen's bishop's pawn one step.
 11. W. The queen's knight at his king's fourth square, must win the game.
-

THE QUEEN'S GAMBIT ;

Wherein there are six back-games.

- 1 W. The queen's pawn two steps.
 B. The queen's pawn two steps likewise.
 2 W. The queen's bishop's pawn two steps.
 B. The pawn takes the pawn.
 3 W. The king's pawn two moves.†
 B. The king's pawn two moves.†
-

* Withdrawing your king to his bishop's place makes it impossible for your adversary to preserve the gambit pawn, which will be always in your power to take.

† If, instead of two, you had pushed this pawn but one step, your adversary would have shut up your queen's bishop for at least half the game ; the first back-game will be the evidence of it.

‡ If, instead of playing this pawn, he had sustained the gambit pawn, he had lost the game. This will be seen by a second back-

- 4 W. The queen's pawn one move.*
 B. The king's bishop's pawn two moves.†
- 5 W. The queen's knight at her bishop's third square.
 B. The king's knight at his bishop's third square.
- 6 W. The king's bishop's pawn one move.
 B. The king's bishop at his queen's bishop's fourth square.
- 7 W. The queen's knight at her rook's fourth square.‡
 B. The bishop takes the knight, near the white king's rook.§
- 8 W. The rook takes the bishop.
 B. The king castles.||

game. But if he had neither pushed this pawn, nor taken the gambit pawn, in this case you must have pushed your king's bishop's pawn two steps, and your game would have been in the best of situations.

* If, instead of pushing your pawn forwards, you had taken his king's pawn, you had lost the advantage of the attack. This is the subject of a third back-game.

† If he had played any thing else, you must have pushed your king's bishop's pawn two steps, and by this means have procured your pieces an entire liberty.

‡ If, instead of playing your knight in order to take his king's bishop, or make him remove it from that line, you had taken the gambit pawn, you had lost the game again. This is shown by a fourth back-game.

§ If, instead of taking your knight, he had played his bishop at your queen's fourth square, you must have attacked it with your king's knight, and taken the next move.

|| If, instead of castling, he had pushed his queen's knight's pawn two steps in order to sustain his gambit pawn, it appears by a fifth back-game that he had lost; and if instead of either of these two moves, he had chosen to take your king's pawn, your retaking it would have hindered him from taking yours again with his knight, because he would have lost the game by your giving him check with your queen.

- 9 W. The knight at his queen's bishop's third square.
 B. The pawn takes the pawn.
- 10 W. The king's bishop takes the gambit's pawn.*
 B. The pawn takes the white king's bishop's pawn.
- 11 W. The pawn retakes the pawn.†
 B. The queen's bishop at his king's bishop's fourth square.
- 12 W. The queen's bishop at his king's third square.
 B. The queen's knight at his queen's second square.
- 13 W. The queen at her second square.
 B. The queen's knight at his third square.
- 14 W. The queen's bishop takes the knight.
 B. The rook's pawn retakes the bishop.
- 15 W. The king castles on his queen's side.
 B. The king at his rook's square.
- 16 W. The king's rook at the black king's knight's fourth square.
 B. The king's knight's pawn one move.
- 17 W. The queen at her king's third square.
 B. The queen at her third square.
- 18 W. The knight at his king's fourth square.
 B. The bishop takes the knight.
- 19 W. The pawn retakes the bishop, and re-unites his comrades.
 B. The king's rook at its king's square.

* This particular move demands a sixth back-game; because if you had retaken his king's bishop's pawn with your king's bishop's pawn, you had lost the game again.

† In retaking this pawn, you give an opening to your rook upon his king, and this pawn serves likewise for a better guard to your king; it stops also the course of your adversary's knight; and though you have at present a pawn less, you have the best of the game by the situation.

- 20 W. The king at his queen's knight's square.
B. The queen at her bishop's fourth square.
- 21 W. The queen takes the queen.
B. The pawn retakes the queen.
- 22 W. The queen's rook at its king's square.
B. The king at his knight's second square.
- 23 W. The king at his queen's bishop's second square.
B. The king's rook's pawn one move.
- 24 W. The king's rook at his knight's third square.
B. The knight at his king's rook's fourth square.
- 25 W. The attacked rook saves itself at the queen's knight's third square.
B. The queen's knight's pawn one move.
- 26 W. The queen's pawn one step, to make an opening for your rook and bishop.
B. The pawn takes the pawn.
- 27 W. The king's rook takes the pawn.
B. The queen's rook at its queen's square.
- 28 W. The queen's rook at its queen's square.
B. The knight at his king's bishop's third square.
- 29 W. The king's rook gives check.
B. The king at his rook's square.
- 30 W. The bishop at the black queen's fourth square, to prevent the adversary's pawns advancing.
B. The knight takes the bishop.
- 31 W. The rook retakes the knight.
B. The king's rook at its king's bishop's square.
- 32 W. The queen's rook at its queen's second square.
B. The king's rook at the white king's bishop's fourth square.

- 33 W. The queen's rook at its king's second square.
 B. The queen's pawn one move.
- 34 W. The pawn takes the pawn.
 B. The queen's rook takes the pawn.
- 35 W. The king's rook at the black king's second square.
 B. The king's knight's pawn one step ; if he sustained the pawn, the game was lost
- 36 W. One of the two rooks takes the pawn.
 B. The rook takes the rook.
- 37 W. The rook retakes the rook.
 B. The rook gives check at the white king's bishop's second square.
- 38 W. The king at his queen's bishop's third square.
 B. The rook takes the pawn.
- 39 W. The rook's pawn two steps.*
 B. The king's knight's pawn one step.
- 40 W. The rook's pawn one move.
 B. The knight's pawn one move.
- 41 W. The rook at its king's square.
 B. The knight's pawn one move.
- 42 W. The rook at its king's knight's square.
 B. The rook gives check.
- 43 W. The king at his queen's bishop's fourth square.
 B. The rook at the white king's knight's third square.
- 44 W. The rook's pawn one move.
 B. The rook at its king's knight's second square.

* If you had taken his pawn with your rook, instead of pushing this pawn, you had lost the game ; because your king would have prevented your rook from coming in time to stop the passage of his knight's pawn This may be seen by playing over the same moves.

- 45 W. The king takes the pawn.
 B. The rook's pawn one move.
- 46 W. The king at the black queen's knight's third square.
 B. The rook's pawn one move.
- 47 W. The rooks pawn one move.
 B. The rook takes the pawn.*
- 48 W. The rook takes the pawn.†
 B. The rook at the king's rook's second square.
- 49 W. The pawn two steps.
 B. The pawn one step.
- 50 W. The rook at its king's rook's second square.
 B. The king at his knight's second square.
- 51 W. The pawn one move.
 B. The king at his knight's third square.
- 52 W. The king at the black queen's bishop's third square.
 B. The king at his knight's fourth square.
- 53 W. The pawn one move.
 B. The king at the white king's knight's fourth square.
- 54 W. The pawn advances.
 B. The rook takes the pawn, and playing afterwards his king upon the rook, it is a drawn game, because his pawn will cost your rook.

FIRST BACK-GAME.

Beginning at the third move of the queen's gambit.

3. W. The king's pawn one move.
 B. The king's bishop's pawn two steps.†

* If he did not take your pawn, you must have taken his; and that would have given you the game.

† If, instead of taking his pawn, you had taken his rook, you had lost the game.

‡ Moving of this pawn must convince you, that it had been better to push your king's pawn two steps, because his pawn obstructs the union of your king's and queen's pawns in front.

- 4 W. The king's bishop takes the pawn.
 B. The king's pawn one move.
- 5 W. The king's bishop's pawn one move.
 B. The king's knight at his bishop's third square.*
- 6 W. The queen's knight at her bishop's third square.
 B. The queen's bishop's pawn two steps.†
- 7 W. The king's knight at his king's second square.
 B. The queen's knight at her bishop's third square.
- 8 W. The king castles on his own side.
 B. The king's knight's pawn two steps.‡
- 9 W. The queen's pawn takes the pawn.§
 B. The queen takes the queen.
- 10 W. The rook retakes the queen.
 B. The king's bishop takes the pawn.
- 11 W. The king's knight at his queen's fourth square.
 B. The king at his second square.
- 12 W. The queen's knight at her rook's fourth square.
 B. The king's bishop at his queen's third square.
- 13 W. The king's knight takes the knight.

* He plays this knight to hinder your king's and queen's pawns from assembling.

† This is pushed again with the same design, to prevent the centre pawns from uniting in front.

‡ He plays this pawn to push that of his king's bishop upon your king's pawn in case of need, which would cause an entire separation of your best pawns.

§ If, instead of taking this pawn, you had advanced your own, the adversary would then have attacked your king's bishop with his queen's knight, to compel you to give him check; and in this case, he, playing his king at his bishop's second square, had gained the move upon you, and a very good situation for game.

- B. The pawn retakes the knight.
- 14 W. The king's bishop's pawn one step.*
 B. The king's rook's pawn one step.
- 15 W. The queen's bishop at his queen's second square.
 B. The knight at his queen's fourth square.
- 16 W. The king's knight's pawn one step.
 B. The queen's bishop at his queen's second square.
- 17 W. The king at his bishop's second square.
 B. The queen's bishop's pawn one move.
- 18 W. The knight at his queen's bishop's third square.
 B. The queen's bishop at his third square.
- 19 W. The knight takes the knight.
 B. The pawn retakes the knight.
- 20 W. The king's bishop at his king's second square.
 B. The queen's rook at his king's knight's square.
- 21 W. The queen's bishop at his third square.
 B. The king's knight's pawn takes the pawn.
- 22 W. The bishop takes the rook.†
 B. The pawn takes the king's pawn, giving check.
- 23 W. The king retakes the pawn.

* You advance this pawn to prevent your adversary from putting three pawns in front, which he would have done by pushing only his king's pawn.

† If you had retaken his pawn with your knight's pawn, he would have pushed his queen's pawn upon your bishop, and afterwards would have entered your game with a check of his rook, sustained by his queen's bishop; and if you had taken this pawn with your king's pawn, he might have done the same; which would have given him a very good game, because one of his pawns being then passed (that is to say, a pawn that can be no more stopped but by pieces) will infallibly cost a piece to hinder the making of a queen.

- B. The rook takes the bishop.
- 24 W. The king's bishop at his third square.
B. The king at his third square.
- 25 W. The king's rook at his queen's second square.
B. The queen's pawn gives check.
- 26 W. The king at his bishop's second square.
B. The queen's bishop at the white king's fourth square.
- 27 W. The queen's rook at its king's square.
B. The king at his queen's fourth square.
- 28 W. The king's rook at its king's second square.
B. The rook at its king's square.
- 29 W. The king's knight's pawn one move.
B. The bishop takes the bishop.
- 30 W. The rook takes the rook.
B. The pawn takes the pawn.
- 31 W. The king's rook's pawn one move.
B. The queen's bishop's pawn one move.
- 32 W. The king's rook at the black king's rook's square.
B. The queen's pawn one move.
- 33 W. The king at his third square.
B. The king's bishop gives check at his queen's bishop's fourth square.
- 34 W. The king at his bishop's fourth square,
having no other place.
B. The queen's pawn one move, and wins the game.*

* The loss of this game shows the strength of two bishops against the rooks, particularly when the king is placed between two pawns. But if, instead of employing your rooks to make war against his pawns, you had on the thirty-first move played your rook at the black queen's square; on the thirty-second move brought your other rook at your adversary's king's second square; and on the thirty-third move sacrificed your first rook for his king's bishop; you had made it a drawn game.

SECOND BACK GAME.

Beginning at the third move of the Queen's Gambit.

- 3 W. The king's pawn two steps.
B. The queen's knight's pawn two steps.
- 4 W. The queen's rook's pawn two steps.
B. The queen's bishop's pawn one step.
- 5 W. The queen's knight's pawn one step.
B. The gambit pawn takes the pawn.*
- 6 W. The rook's pawn takes the pawn.
B. The queen's bishop's pawn takes the pawn.
- 7 W. The king's bishop takes the pawn, and gives check.
B. The bishop covers the check.
- 8 W. The queen takes the pawn.
B. The bishop takes the bishop.
- 9 W. The queen retakes the bishop, and gives check.
B. The queen covers the check.
- 10 W. The queen takes the queen.
B. The knight retakes the queen.
- 11 W. The king's bishop's pawn two steps.
B. The king's pawn one move or step.
- 12 W. The king at his second square.
B. The king's bishop's pawn two steps.†
- 13 W. The king's pawn one move.

* It is of the same consequence in the attack of the queen's gambit to separate the adversary's pawns on that side, as it is in the king's gambit to separate them on the king's side.

† By pushing this pawn two steps, the adversary forces you to push forward your king's pawn, in order to cause your queen's pawn, now at the head, to be left behind and of no use. (See observation in page 355.) Nevertheless you must play it; but strive afterwards, with the help of your pieces, to change this your queen's pawn for his king's, and give a free passage to your own king's pawn.

- B. The king's knight at his king's second square.
- 14 W. The queen's knight at his bishop's third square.
B. The king's knight at his queen's fourth square.*
- 15 W. The knight takes the knight.
B. The pawn retakes the knight.
- 16 W. The queen's bishop at her rook's third square.
B. The bishop takes the bishop.
- 17 W. The rook takes the bishop.
B. The king at his second square.
- 18 W. The king at his bishop's third square.
B. The king's rook at its queen's knight's square.
- 19 W. The knight at his king's second square.
B. The king at his third square.
- 20 W. The king's rook at its queen's rook's square.
B. The king's rook at its queen's knight's second square.
- 21 W. The queen's rook gives check.
B. The knight covers the check.
- 22 W. The king's rook at the black queen's rook's fourth square.
B. The king's knight's pawn one move.
- 23 W. The knight at his queen's bishop's third square.
B. The queen's rook at its queen's square.
- 24 W. The queen's rook takes the rook's pawn.
B. The rook takes the rook.

* In this present situation your adversary is forced to propose the changing of knights, though by this move he separates his pawns; because, if he had played any thing else, you would have taken his rook's pawn, by playing only your knight at the black queen's knight's fourth square.

- 25 The rook retakes, and must win the game, having a pawn superiority, and moreover a pawn past, which amounts to a piece.*
-

THIRD BACK-GAME.

Beginning at the fourth move of the Queen's Gambit.

- 4 W.* The queen's pawn takes the pawn.
B. The queen takes the queen.
- 5 W. The king retakes the queen.
B. The queen's bishop at his king's third square.
- 6 W. The king's bishop's pawn two steps.
B. The king's knight's pawn one step.
- 7 W. The queen's knight at her bishop's third square.
B. The queen's knight at his queen's second square.
- 8 W. The king's rook's pawn one move.
B. The king's rook's pawn two moves.
- 9 W. The queen's bishop at his king's third square.
B. The king castles on his queen's side.
- 10 W. The king at his queen's bishop's second square.
B. The king's bishop at his queen's bishop's fourth square.
- 11 W. The bishop takes the bishop.
B. The knight retakes the bishop.
- 12 W. The king's knight at his bishop's third square.
B. The queen's bishop's pawn one step.

* By this back-game it appears that a pawn, when separated from his fellows, will seldom or never succeed.

- 13 W. The king's knight at the black king's knight's fourth square.
B. The queen's knight's pawn two steps.
- 14 W. The king's bishop at his king's second square.
B. The king's knight at his king's second square.
- 15 W. The knight takes the bishop.
B. The pawn retakes the knight.
- 16 W. The queen's rook's pawn two steps.
B. The queen's knight at the white queen's knight's third square.
- 17 W. The queen's rook at its second square.
B. The queen's rook's pawn one step.
- 18 W. The queen's rook's pawn takes the pawn.
B. The queen's rook's pawn retakes the pawn.
- 19 W. The rook gives check.
B. The king at his queen's knight's second square.
- 20 W. The rook takes the rook.
B. The rook retakes the rook.
- 21 W. The rook at his queen's square.
B. The queen's knight gives check at the white queen's fourth square.
- 22 W. The king at his queen's knight's square.
B. The king at his queen's knight's third square.
- 23 W. The king's knight's pawn two steps.
B. The pawn takes the pawn.
- 24 W. The pawn retakes the pawn.
B. The queen's bishop's pawn one move.
- 25 W. The king's knight's pawn one move.
B. The knight at his queen's bishop's third square.
- 26 W. The bishop at his king's knight's fourth square.
B. The queen's knight's pawn one move.

- 27 W. The knight at his king's second square.
 B. The king's knight at his queen's rook's fourth square.
- 28 W. The knight takes the knight.
 B. The pawn retakes the knight.
- 29 W. The bishop takes the pawn.
 B. The king at his queen's bishop's fourth square.
- 30 W. The king's bishop's pawn one step.
 B. The queen's pawn one move.
- 31 W. The king's bishop's pawn takes the pawn.*
 B. The knight at the white queen's knight's third square.
- 32 W. The pawn one move.
 B. The rook at its queen's rook's square, to give check-mate.
- 33 W. The rook takes the pawn.
 B. The rook gives check.
- 34 W. The king has but one place.
 B. The rook gives check-mate at its queen's bishop's square.

FOURTH BACK-GAME.

- Beginning at the seventh move of the Queen's Gambit.*
- 7 W. The king's bishop takes the gambit pawn.
 B. The king's bishop's pawn takes the pawn.
- 8 W. The king's bishop's pawn retakes the pawn.
 B. The king's knight at the white king's knight's fourth square.
- 9 W. The king's knight at his rook's third square.
 B. The queen gives check.
- 10 W. The king at his queen's second square.

* He takes this pawn, to make a queen upon the white king's knight's square, where his bishop sustains the pawn.

- B. The king's knight at the white king's third square.
 11 W. The queen at her king's second square.
 B. The queen's bishop at the white king's knight's fourth square.
 12 W. The queen at her third square.
 B. The king's knight takes the king's knight's pawn.
 13 W. The king's knight at his home.
 B. The queen at the white king's square giving check.
 14 W. The king retires.
 B. The king's bishop takes the knight, and will easily win the game.
-

FIFTH BACK-GAME.

At the eighth move of the Queen's Gambit.

- 8 W. The rook retakes the bishop.
 B. The queen's knight's pawn two steps.
 9 W. The knight at the black queen's bishop's fourth square.
 B. The king castles on his own side.
 10 W. The queen's rook's pawn two moves.
 B. The queen's knight at her rook's third square.
 11 W. The knight takes the knight.
 B. The bishop retakes the knight.
 12 W. The rook's pawn takes the pawn.
 B. The bishop retakes the pawn.
 13 W. The queen's knight's pawn one move.
 B. The king's bishop's pawn takes the pawn.
 14 W. The queen's knight's pawn takes the pawn.
 B. The bishop at his queen's second square.
 15 W. The queen's bishop at the black king's knight's fourth square.

- B. The pawn takes the pawn.
16 W. The pawn retakes the pawn.
B. The king at his rook's square.
17 W. The king's bishop at his queen's third square.
B. The king's rook's pawn one move.
18 W. The king's rook's pawn two moves.
B. The rook's pawn takes the queen's bishop.
19 W. The pawn retakes the pawn.
B. The knight at his rook's fourth square.
20 W. The bishop at the black king's knight's third square.
B. The knight at the white king's bishop's fourth square.
21 W. The queen at her bishop's second square.
B. The knight takes the bishop to avoid the mate.
22 W. The queen's retakes the knight.
B. The bishop at his king's bishop's fourth square.
23 W. The queen gives check.
B. The king retires.
24 W. The king's knight's pawn one move.
B. The bishop takes the pawn.
25 W. The queen takes the bishop.
B. The queen at her king's bishop's third square.
26 W. The queen's rook at the black queen's rook's third square.
B. The queen takes the queen.
27 W. The queen's rook retakes the queen.
B. The king's rook at his bishop's second square.
28 W. The king at his second square.
B. The queen's rook's pawn two steps.
29 W. The queen's rook at the black king's third square.

- B. The rook's pawn one move.
30 W. The rook takes the pawn.
B. The rook's pawn one move.
31 W. The king's rook at his queen's rook's square.
B. The rook's pawn one move.
32 W. The at its king's third square.
B. The king's rook at his bishop's third square.
33 W. The king at his queen's third square.
B. The rook gives check.
34 W. The king at his fourth square.
B. The rook takes the rook.
35 W. The king retakes the rook.
B. The rook at its queen's rook's third square.
36 W. The king at his queen's fourth square.
B. The king at his bishop's second square.
37 W. The king at his queen's bishop's third square.
B. The rook gives check.
38 W. The king at his queen's knight's fourth square.
B. The rook takes the pawn.
39 W. The rook takes the pawn.
B. The king at his second square.
40 W. The queen's bishop's pawn one step.
B. The king's knight's pawn two steps.
41 W. The rook at the black queen's rook's second square.
B. The king at his queen's square.
42 W. The king at the black king's knight's fourth square.
B. The knight's pawn one move.
43 W. The king at the black queen's bishop's third square.
B. The rook gives check.
44 W. The pawn covers the check.
B. The pawn takes the pawn.

- 45 W. The pawn retakes the pawn.
 B. The king at his home.
- 46 W. The rook at the black king's knight's second square.
 B. The rook at its third square.
- 47 W. The king at the black queen's bishop's second square, and afterwards pushing his pawn, will win the game.
-

SIXTH BACK-GAME.

- Beginning at the tenth move of the Queen's Gambit.*
- 10 W. The king's bishop's pawn takes the pawn.
 B. The knight takes the king's pawn.
- 11 W. The knight retakes the knight.
 B. The queen gives check.
- 12 W. The knight at his king's knight's third square.
 B. The queen's bishop at the white king's knight's fourth square.
- 13 W. The king's bishop at his king's second square.*
 B. The queen takes the rook's pawn.
- 14 W. The king's rook at his bishop's square.†
 B. The queen takes the knight and gives check.
- 15 W. The king at his queen's second square.
 B. The queen's knight at his queen's second square.
- 16 W. The rook takes the rook.‡

* Any thing you could have played could not save a piece.

† If, instead of playing your rook, you had played your king, the adversary had won sooner, by only playing his rook at your king's bishop's second square.

‡ If you had taken his bishop, he would have given you check with his queen at your queen's third square, and mate by taking your rook the following move.

- B. The rook retakes the rook.
 17 W. The queen at her king's square.
 B. The rook at the white king's bishop's second square, and wins the game.
-

PHILIDOR'S LEGACY.

SITUATION OF THE PIECES, WHITE HAVING THE MOVE.

<i>White.</i>	<i>Black.</i>
King on queen's knight square.	King on his rook's square.
Queen on her bishop's third square.	Queen's rook on its own square.
Queen's rook's pawn on its own square.	King's rook on king's knight's third square.
Queen's knight's pawn on its own square.	King's rook's pawn on its own square.
Queen's bishop's pawn on its own square.	King's knight's pawn on its own square.
Knight on adversary's king's knight's fourth square.	
W. Knight to adversary's king's bishop's second square checking.	
B. King to his knight's square.	
W. Knight to adversary's king's rook's third square, giving double check.	
B. King to his rook's square.	
W. Queen to adversary's queen's knight's square checking.	
B. Queen's rook takes adversary's queen.	
W. Knight to adversary's king's bishop's second square, giving check mate.	

*The first game of the match between the London
and Edinburgh Chess Clubs.*

White.

LONDON.

- 1 K. P. two squares.
- 2 K. Kt. to K. B. third square.
- 3 Q. P. two squares.
- 4 K. B. to Q. B. fourth square.
- 5 Q. B. P. one square.
- 6 K. castles.
- 7 Q. Kt. takes P.
- 8 Q. Kt. to adv. Q. fourth square.
- 9 Q. Kt. P. two squares.
- 10 Q. Kt. takes Kt.
- 11 K. Kt. to adv. K. Kt. fourth square.
- 12 Q. B. to Q. Kt. second square.
- 13 Q. to Q. Kt. third square.
- 14 K. Kt. takes K. B. P.
- 15 Q. takes K. B.
- 16 K. B. P. two squares.
- 17 Q. takes Kt.
- 18 Q. to Q. B. third square.
- 19 K. B. P. one square.
- 20 K. R. to K. B. fourth square.
- 21 K. P. one square.
- 22 Q. takes P.
- 23 Q. R. to K. square.
- 24 K. B. P. one square.
- 25 K. R. to adv. K. B. fourth square.

Black.

EDINBURGH.

- 1 K. P. two squares.
- 2 Q. Kt. to Q. B. third square.
- 3 K. P. takes P.
- 4 K. B. to Q. B. fourth square.
- 5 Q. to K. second square.
- 6 P. takes P.
- 7 Q. P. one square.
- 8 Q. to her second square.
- 9 Q. Kt. takes P.
- 10 K. B. takes Kt.
- 11 K. Kt. to K. R. third square.
- 12 K. to K. B. square.
- 13 Q. to K. second square.
- 14 K. Kt. takes Kt.
- 15 K. Kt. to K. fourth square.
- 16 Kt. takes K. B.
- 17 Q. to K. B. second square.
- 18 Q. B. to K. third square.
- 19 Q. B. to adv. Q. B. fourth square.
- 20 Q. Kt. P. two squares.
- 21 P. takes P.
- 22 K. R. P. one square.
- 23 K. R. to K. R. sd. sq.
- 24 K. Kt. P. two squares.
- 25 Q. R. P. two squares.

White.

LONDON.

- 26 Q. to adv. Q. B. fourth square, checking.
 27 K. R. takes P. check.
 28 Q. takes P. checking.
 29 B. to Q. fourth square.
 30 Q. to adv. Q. B. fourth square, checking.
 31 Q. to adv. K. Kt. fourth square, check.
 32 Q. B. checks.
 33 Q. to ad. Q. fourth sq.
 34 Q. to adv. Q. Kt. two squares.
 35 K. B. P. checks
 36 R. to K. B. square, checking.
 37 Q. to K. fourth square, checking.
 38 Q. to adv. K. square, checking.
 39 Q. to adv. K. Kt. square, checking.
 40 K. Kt. P. two squares.
 41 Q. takes Q. R.
 42 K. to K. R. square.
 43 B. to Q. R. third sq.
 44 Q. to adv. Q. B. third square.
 45 Q. takes Q. Kt. P.
 46 K. to K. Kt. square.
 47 Q. to Q. Kt. second sq.
 48 Q. to K. Kt. second sq.
 49 K. takes Q.
 50 K. takes B.
 51 B to ad. K. second sq.
 52 Q. R. P. one square.

Black.

EDINBURGH.

- 26 K. to K. Kt. square.
 27 P. takes P.
 28 K. to K. B. square.
 29 B. to K. third square.
 30 K. to K. Kt. square.
 31 K. to K. B. square.
 32 K. to his square.
 33 Q. R. to its third square.
 34 Q. to K. R. fourth square.
 35 K. takes P.
 36 K. to Kt. third square.
 37 B. interposes.
 38 R. interposes.
 39 K. to K. B. third sq.
 40 Q. R. to its square.
 41 Q. takes P. checking.
 42 R. to Q. second sq.
 43 K. to K. B. second square.
 44 R. to adv. Q. square.
 45 Q. to adv. K. fourth square, checking.
 46 K. to K. Kt. third sq.
 47 Q. to adv. K. Kt. fourth sq., checking.
 48 Q. takes Q. checking.
 49 B. to adv. K. R. third square, checking.
 50 R. takes R.
 51 Q. R. P. one square.
 52 R. to K. B. fourth square.

White resigned the game.

MR. HOYLE'S CHESS LECTURES.

TO MAKE A DRAWN GAME, HAVING YOUR KING
ONLY AGAINST A KING AND A PAWN.

If your king, having the move, be opposite to your adversary's king, one square only between them, in that case always play your king in such a manner as to keep his king opposite to yours, and it must be a drawn game ; but, if he persists, by endeavouring to win, he must lose by stalemate, in drawing you upon the last square.

TO GAIN THE MOVE WITH AN EQUAL NUMBER OF
PAWNS, AND NO PIECE.

SUPPOSE your adversary and you have each four pawns left, two upon each side of the board ; and that your king is at liberty to attack his adversary's pawns upon one side ; by reckoning how many moves it will take your king to march and capture those two pawns, and adding the number of moves, which will be necessary for you to make a queen with one of yours, you will find out the exact number of moves, before you can make a queen. Take the like method with your adversary's game, and you will perceive who has gained the move.

This is so necessary a part of the game, that if A understand it, and B do not, B has little chance to win.

There are four houses, or squares, to win, and also four not to win a game, with the king and queen against a king and pawn only.

FIRST SITUATION FOR NOT WINNING.

White king on the black queen's rook's square.
 White pawn on the black queen's rook's second square.

Black queen in the white queen's place.
 Black king in the white king's place.

Black is to play.

SECOND SITUATION FOR NOT WINNING.

White king in the black queen's knight's place.
 White pawn in the black queen's bishop's second square.

Black queen in the white queen's place.
 Black king in the white king's place.

Black is to play.

Place the pieces on the other side of the board, in the same situation, it will make a drawn game, or else the pawn and king must win by stale-mate.

White should observe not to guard the pawn, unless it may be taken by giving check at the same time, by which means the black king can never gain a move, and the black queen cannot take the pawn without giving stale-mate.

SITUATION FOR WINNING.

WHITE king in the black king's rook's square.
 White pawn in the black king's knight's second square.

Black king in the white king's square.

Black queen in the white queen's square.

Black is to play.

The black queen gives check in her rook's fourth square, by which she gains a move for her king; and, as often as she forces the white king to go behind his pawn, she gives a move to her king.

DRAUGHTS.

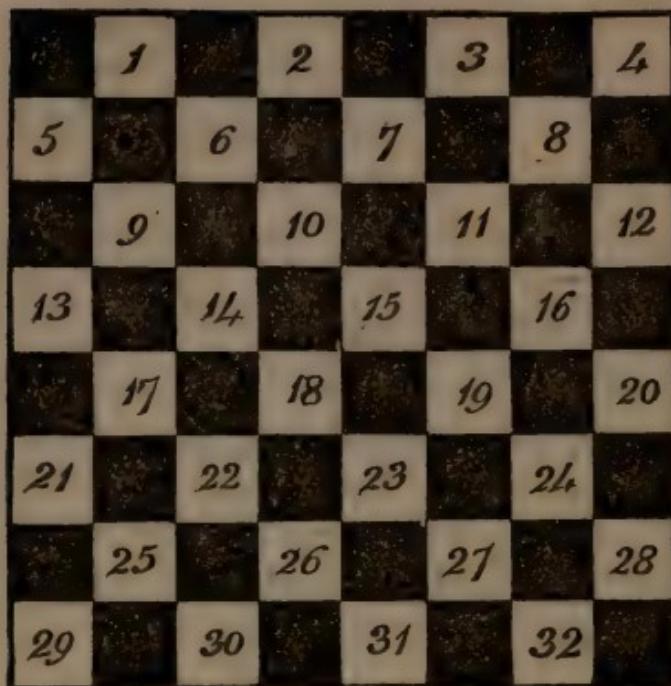
INTRODUCTION.

1. THE draught-table, of which the print affords an accurate representation, must be placed with an upper white corner towards the right-hand.
2. The table being properly placed, I number the white squares in order from 1 to 32.
3. The men are black and white, or yellow round pieces, similar to those used at Backgammon. The black pieces are supposed to be placed upon the first twelve, and the white on the last twelve white squares, in all the following games.
4. Each player alternately moves one of his men forwards, at a right angle, to the next white square; and when the man is moved to a square adjoining to an enemy, and another square next angularly behind the man so moved is unoccupied at that time, or afterwards become so before the foe is displaced, then the man so placed or left ungarded must be captured by the opponent, whose man consequently leaps over to the vacant square, and the prisoner is taken off the board. The same practice is immediately to be repeated, in case the man effecting a capture thereby gets situated angularly fronting an enemy unguarded behind. This may be best illustrated by exam-

ple ; as for instance, in the first game black commences by moving from the 11th square to the 15th ; then white moves from 22 to 18, by which his man is liable to be taken by the adversary black, who leaps from 15 to 22, and in his turn is ensnared by white, whose man leaps from 25 to 18 ; and had it so happened, that one of the black was placed on 14, and No. 9 unoccupied, white could then take that man also ; and moreover, if black had besides a man on 6, and No. 2 open, white must likewise both take that, and make a king besides ; for when any man gets onwards to the last row on the end of the board opposite to that from whence his colour started, then he becomes a king, and is crowned by placing one of the captives upon him, and he thereby obtains the privilege of moving and taking either backwards or forwards in an angular direction.

5. When any player neglects to capture the antagonist, he then is said to stand the *huff*. For which see the fourth law at page 401.

6. For the playing of any move required, the numbers may be written upon the board itself, near a corner of each square, so as to be easily seen when the men are placed. Or a table may be drawn upon paper or card, and the squares numbered, as in the following figure, and such a table will be a ready guide to any move directed.



Draught Table.

OBSERVATIONS ON THE GAME OF DRAUGHTS.

The learner should select a few games for practice, and become master of such variations as can be made from them ; and in respect to any games he may wish to reverse, let the following instructions be attended to. Write down those figures required to make the numbers played *from and to* exactly 33, as in the example shewn in page 399. The game is begun by black moving from 11 to 15 ; and as 22 added to 11, and 18 to 15, each form 33, set down 22, 18 ; which, in reversing the game, must be white's first move. By acting in a similar manner with every succeeding move, the game will be completely reversed.

EXAMPLE.				REVERSED.			
No.	Colour.	From	To	No.	Colour.	From	To
1	B	11	15	1	W	22	18
2	W	23	18	2	B	10	15
3	B	8	11	3	W	25	22
4	W	27	23	4	B	6	10
5	B	4	8	5	W	29	25
6	W	23	19	6	B	10	14
7	B	9	14	7	W	24	19
8	W	18	9	8	B	15	24
9	B	5	14	9	W	28	19
10	W	22	17	10	B	11	16
11	B	15	18	11	W	18	15
12	W	26	22	12	B	7	11
13	B	11	15	13	W	22	18
14	W	17	13	14	B	16	20
15	B	7	11	15	W	26	22
16	W	31	26	16	B	2	7
17	B	18	23	17	W	15	10

Black wins.

White wins.

Having the move is a decided advantage even over a skilful opponent in particular cases, and means possessing that situation on the board which will eventually enable you to drive your adversary into a confined position, and thereby finally secure the last move to yourself; but where your men are in a confined state, the move would not only be of no service to you, but might cause the loss of the game. Number the men and squares: and if one of them prove even, and the other odd, you have got the move: when both are even, or both odd, you have not the move; exemplified in this critical situation, in which white is to play first.

White { *26 | 19
 32 | 28* } Black.

Here the adverse men are even, but the white squares are odd, as, from 26, a white king, to 28, a black king, there are three white squares, *viz.* 31, 27, and 24, and between 32, a white, and 19 a black man, are two, 27, and 23, in all, five; this may be reckoned otherwise, but take it what way you will, they still prove odd; consequently white, so situated, has the move. The player who wants, and has not got the move, should endeavour to obtain the same by giving man for man. There is a shorter method to determine who has the move; for instance, if white should wish to know whether any one particular man of his has the move over any other particular man of black; let him examine the situations of both, and if there be a black square on the right angle under the black man, white has the move; that is, suppose white is to play, and his man is at 30, when black is at 3; the right angle is then in the black square directly under 3, between 31 and 32, therefore white at that time has the move. This rule will hold good in regard to any number of men, and in all cases whatsoever.

No advantage is derived from being first player; for as the men and squares are then both even, he cannot have the move; and though the other player has it, it is of no use to him in that stage of the game: while the combatants give man for man, the move will alternately belong to each; the first player will obtain it at odd numbers, 11, 9, 7, 5, 3, 1; the second will gain it at even, 12, 10, 8, 6, 4, 2, and some error must first be committed before the move can be driven out of these directions.

LAWS OF THE GAME OF DRAUGHTS.

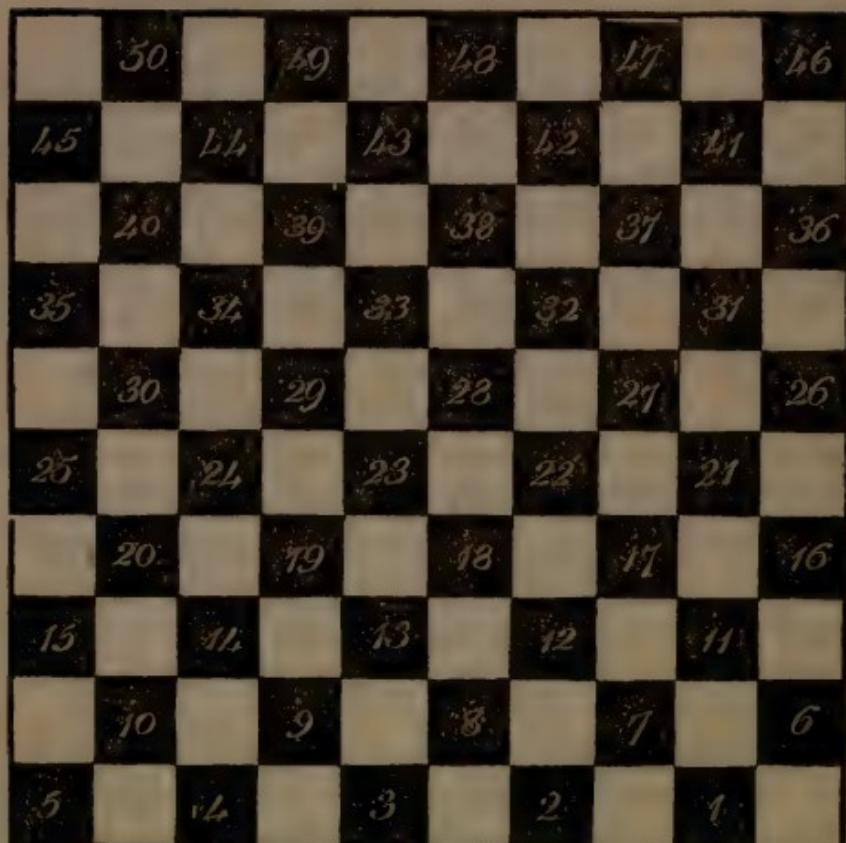
1. The first move of every game must be taken alternately by each player, whether the last be won or drawn.
 2. Pointing over the board, or using any action to interrupt the adversary in having a full view of the men, is not to be allowed.
 3. The men may be properly arranged in any part of the game ; and after they are so placed, whichever player touches a man, must play him somewhere ; but if the man have been so moved as to be visibly over the angle separating the squares the party is playing *from and to*, that move must be completed.
 4. In case of standing the *huff*, it is optional with the opponent either to take the man, or insist that the antagonist take his, so omitted by the huff.
 5. If either party, when it is his turn to move, hesitate above three minutes, the other may call upon him to play ; and if, after that, he delay above five minutes longer, then he loses the game.
 6. During a game, neither party must quit the room without the other's consent, and a third person should decide the time to be allowed for his absence ; and if thought necessary, accompany him.
 7. When the *draws* are given to an inferior player, the game must be played to a more advanced state than as exemplified in this book ; and when the situations become so equal that no advantage can be gained, then he who gives the draws, shall either force the other out of his strong position, or be adjudged to have lost the game.
- N.B. In playing the *losing game*, either player can insist upon his opponent taking all the men he has to lose.

No.	Colour	fr.	to	No.	Colour	fr.	to	VARIATION from move 1.			
								No.	Colour	fr.	to
1	B	11	15	13	B	11	15	—	—	—	—
2	W	22	18	32	W	20	16	—	—	—	—
3	B	15	22	33	B	15	18	1	B	11	15
4	W	25	18	34	W	24	20	2	W	24	20
5	B	8	11	35	B	18	27	3	B	8	11
6	W	29	25	36	W	31	24	4	W	22	18
7	B	4	8	37	B	14	18	5	B	15	22
8	W	25	22	38	W	16	11	6	W	25	18
9	B	12	16	39	B	7	16	7	B	4	8
10	W	24	20	40	W	20	11	8	W	29	25
11	B	10	15	41	B	18	23	9	B	10	15
12	W	27	24	42	W	11	8	10	W	25	22
13	B	16	19	43	B	23	27	11	B	12	16
14	W	23	16	44	W	8	4	12	W	21	17
15	B	15	19	45	B	27	31	13	B	9	13
16	W	24	15	46	W	4	8	14	W	17	14
17	B	9	14	47	B	31	27	15	B	16	19
18	W	18	9	48	W	24	20	16	W	23	16
19	B	11	25	49	B	27	23	17	B	8	12
20	W	32	27	50	W	8	11	18	W	14	10
21	B	5	14	51	B	23	18	19	B	12	19
22	W	27	23	52	W	11	8	20	W	27	23
23	B	6	10	53	B	18	15	21	B	7	14
24	W	16	12	52	White loses				W	23	7
25	B	8	11	52					White wins		
26	W	28	24								
27	B	25	29								
28	W	30	25								
29	B	29	22								
30	W	26	17								

N.B. White loses by the 12th move of the game.

DRAUGHTS—GAME II.

POLISH DRAUGHTS.



The Polish Draught Board.

THIS beautiful and scientific game is comparatively but little known in this country, although it may be fairly questioned if it does not afford as wide a field for brilliant combination as chess itself.

It is played upon a board containing 100 squares, the number of pieces are 40, the mechanism of which, and the march of the game, will be soon understood by perusing the following treatise :—

RULES OF POLISH DRAUGHTS.

1. The pawn moves forward diagonally one square at a time, except on taking, when he may be moved as often as there remain pieces to be taken, and also backwards for that purpose.

2. If you touch a pawn it must be moved, but as long as the finger is not taken off, it may be moved at pleasure. If, again, you touch several pawns for the purpose of arranging them, you must give notice to that effect, or your adversary may oblige you to play which of them he chooses.

3. When several pawns are to be taken, they must not be removed from the board until the piece capturing them has reached its last square.

4. When you have several pawns to take, if in removing them you leave by mistake one or more on the board, your adversary has the right to huff you if he chooses. Should he not do this, he can oblige you to take. But if your adversary who has the right of huffing has touched the pawn to be huffed, he loses the right to make you take it, and must huff you.

5. When a player refuses to capture a piece, he loses the game. This rule is founded upon the consideration that whoever refuses to take, refuses to play, and of course throws up the game.

6. When a player who can take on one side only, touches accidentally another pawn than the one which he ought to take, or, when he can take on several sides, he touches another pawn than that which he ought to take on the most favourable side, his adversary may either huff the pawn in question, or oblige him to play the one touched.

7. After the move is made, you can no longer huff, if the player who neglected taking the first time does so the following move, or if the pawn

which ought to have taken has changed its position; but if things remain in the same state, the player who neglected to huff or to insist on your taking, may do so after several moves, whether he perceived or not at first the fault of his adversary.

8. The pawn or the queen which captures, not only cannot repass over a square it has once leapt, but on the contrary must halt upon the square over which it has passed, and upon which there is a pawn or a queen which forms a part of those that may be taken, if this pawn or this queen has another behind it, although there may be beyond several pieces that it might take; and what is more, this pawn or the queen placed behind the pawn or the queen which ought to take, has the right to take this pawn or queen if undefended. The following example will illustrate our position:

White has a pawn upon 27, 32, 33, and 37, and a queen at 43.

Black has a pawn at 3, 4, 9, and 19, and a queen at 10 and 13.

Black queen at 13 can take 4, and is obliged to place herself at 28, because she is stopped by the pawn 32, which she cannot take till she has placed herself so that the white pawn at 32, which is behind her, takes her and two other pawns, and goes to queen at 5.

9. The following are the circumstances under which the huff may take place:—

1st. When instead of taking the greatest number of pieces you are able, you take an inferior number. Thus if on one side you have the option of capturing four pawns, and on another three, you *must take the former*.

2d. Again, supposing *with equal numbers* that there are pawns on one side and queens on the other, or a queen and some pawns, in that case you

must capture the queens or the queen, as the last-mentioned piece is more valuable than a pawn. However, when on one side you can take three pawns, and on the other a queen and a pawn, or even two queens, you must capture the former, as they exceed the latter in number.

10. When a pawn reaches one of the squares upon which it is crowned, he must do so by a move which *terminates there*, for on reaching it, should there be an adversary's piece *en prise*, he is obliged to take it, and continue still a pawn.

11. A queen differs from a pawn not only by its march, but also in its mode of capturing. It differs in its march from the pawn in this, that like the bishop at chess it may move from one extremity of the board to the other, if the space be open, that is, when on the line there are none of her own pieces or of the adversary's which are not *en prise*. It differs again from the pawn in its manner of capturing, because, in doing so, it may traverse several squares at once, provided they are empty, so that it may turn to the right or the left, and sweep round the board.

12. When two equal players at the end of a game are left, one with three queens, and the other with only one, but which occupies the great central line, *it is a drawn game*. However, when the single queen does not occupy the central line, there are sever always of winning; but as they are not forced, and as the game must have an end, the player having the three queens cannot oblige his adversary to play more than twenty moves, and the latter cannot refuse. If the player having the three queens gives an advantage, he can only demand twenty coups; but if the advantage consists in drawing the game, then he is allowed

twenty-five coups ; after which he loses the game if his adversary still preserves his queen.

13. In a game, the number of coups of which are limited, you cannot exceed them under the pretence that the coup which exceeds the conventional number is a necessary consequence of the one preceding it. In such a case the game is won when the last coup of the number agreed upon is played. The following example will illustrate the position :—

Suppose the player having the three white queens occupies the squares 13, 25, and 41, and the adversary's single black queen 26. In this position, there have been nineteen coups played, and it is now the turn of the white to play and commence the twentieth coup; he sacrifices the queen at 13 ; black takes her, and places itself at 3, and thus terminates the twentieth coup ; the game is now over, although by continuing it the white must have won the game by sacrificing the queen at 41 ; but then it would have exceeded the number of coups agreed upon. A coup is not complete until each player has played once ; thus when the first player plays for the twentieth time, the twentieth coup is not completed until the last player has played the same number of times.

14. When at the end of a game a player who has only one queen offers his adversary who has a queen and two pawns, or two pawns and a queen, to crown the two pawns or the pawn, in order to count the number of coups, limited as above, the latter must accept the offer, or the first may draw the game.

15. When a player makes a false move, the adversary has the option or not of correcting it. Playing an adversary's pawn, for instance, is not a fault.

16. A game must be played out, or it is lost for him who leaves off without the consent of his adversary.

17. On playing for money, the money must be staked every game; the same rule applies to bets.

18. If when money is played for, a looker on should give even indirectly advice to one of the players which should decide the game, then for his indiscretion he ought to pay the amount of the stakes and the bets lost in consequence. However, whether in playing for money or not, lookers on ought to observe the strictest silence; should any dispute arise, it must be referred to such of the spectators who have not betted on the result, and their decision ought to be final.

19. When a player gives an advantage, both players must play three or four games, or the number in ratio to the advantage given, and in giving the revenge an equal number must be played.

OBSERVATIONS UPON DRAWING THE GAME.

When one of the players is reduced to one queen and the other to three, there is no forced coup by which the latter can win. Between equal players the game will therefore be a drawn one; but between two unequal players the result is different, for though there is no forced coup by which the three may win, there are several into which his adversary may fall, if unacquainted with them. We shall, therefore, point out the coups and positions he ought to avoid. We have already stated that the number of coups to be played in this case are twenty; it is, therefore, necessary to avoid the ambuscades which may

be laid for you in these twenty coups, and that is not difficult, as the player who has the three queens, has only seven coups by which he can win, and he has scarcely time to arrange them within the prescribed number of coups.

If the player who has only one queen occupies the diagonal line which extends from 5 to 46, to draw the game he has only to move constantly from one extremity of this line to the other, unless he should perceive that his adversary is preparing the only coup by which he can win the game—it is as follows:—

The white queen is upon 46; the three black queens upon 13, 16, and 27.

If the white queen who has the move went to the opposite extremity of the line or upon the squares 10 or 14, it is evident she would lose the game, because the adversary, by sacrificing two of his queens, would capture her afterwards; but nothing is more easy than to avoid this or a similar coup, it is only requisite to take up a position below the coup of the two on whichever side it may be arranged; for this purpose the white queen has four squares, 41, 37, 28, 23; this will serve as a guide in any other position. But when the central line is occupied by the player who has the three queens, the affair is different; there are then seven different kind of coups by which he may win the game.

First coup.—The three white queens occupy the squares 46, 37, and 27, and the black queen 11.

White sacrifice two at 22 and wins the game; the same ambuscade may be laid on several sides, but it is so apparent that it is seldom tried.

Second coup.—The three white are on the squares 19, 27, and 37, and the black at 11.

White sacrifices two at 22, and black loses on

whatever side he may take; for if in taking he does not go to the bottom, that is to 46 and 5, he will be recaptured, and if he goes to either extremity of the line, white, by retiring to the other, prevents his moving without being taken.

Third coup.—White occupy 18, 26, and 28; black 20; white from 18 to 9; black takes and goes to 3; white then exchanges one for one by moving from 28 to 17.

Fourth coup.—White occupy 10, 36, and 37; black 29; white sacrifices at 42 and then moves to 15, by which means the black queen is blocked up, and cannot move without being captured.

Fifth coup.—White occupy 1, 35, and 49; black 17; white sacrifices a queen at 44, and moves his queen from 1 to 6; the black queen, which was obliged to take and to occupy 50, can then only move to 45; when white moves his queen from 6 to 1, and wins the game.

Sixth coup.—White occupy 9, 28, and 35; black 21; white from 9 to 25, which decides the game, because on whatever side the black queen be placed to avoid being taken or giving one for one, she must move upon either 26, 12, 38, 27, or 16, by which the game is equally lost.

Seventh coup.—White upon 7, 35, and 37; Black 43. White from 37 to 48, which decides the game; for there is no other square upon which black can be placed without losing, as may be easily seen.

Remark.—If towards the end of a game you have a queen and a pawn against three queens, sacrifice your pawn without hesitation, as the game is more easily defended with a single queen.

ILLUSTRATIONS OF THE TERM TO LOSE THE COUP
OR THE POSITION.

White at 23, 33, 42, 47, and 49.

Black at 4, 12, 36, 41.

<i>Black.</i>	<i>White.</i>
41 to 46	23 to 18
12 to 23	33 to 28
23 to 32	42 to 37
32 to 41	49 to 43
4 to 9	43 to 39
9 to 14	38 to 33
14 to 20	33 to 29
20 to 25	29 to 24

Black can now no longer play without losing,
because the white have the coup.

ILLUSTRATIONS OF VARIOUS DIFFICULT COMBINATIONS AT POLISH DRAUGHTS.

No. 1.

Whites at 17, 22, 23, 27, 31, 33, 36, 37, 38, 40, 44, 50.

Blacks at 1, 5, 6, 7, 8, 9, 10, 13, 20, 25, 26, 30.

<i>Whites.</i>	<i>Blacks.</i>
23 to 19	13 to 24
33 to 29	24 to 42
37 to 48	26 to 37
17 to 11	6 to 28
36 to 31	37 to 26
27 to 21	26 to 17
40 to 34	30 to 39
44 to 24	Lost.

No. 2.—15 to 15.

Whites at 25, 26, 27, 28, 30, 31, 32, 33, 35, 36, 37, 40, 41, 45, 48.

Blacks at 6, 7, 8, 9, 11, 13, 14, 15, 16, 17, 18,
19, 21, 23, 24.

A most brilliant and complicated coup.

<i>Whites.</i>	<i>Black.</i>
25 to 20	14 to 34
40 to 20	15 to 24
35 to 30	24 to 35
45 to 40	35 to 44
33 to 29	23 to 34
28 to 22	17 to 28
32 to 1 queen	21 to 32
1 to 27	Lost.

No. 3.—13 to 13.

Whites at 28, 30, 32, 33, 34, 36, 37, 38, 39, 43,
45, 48, 49.

Blacks at 2, 3, 5, 7, 8, 9, 12, 13, 15, 16, 18, 25, 26.

This coup is a good study for beginners.

<i>Whites.</i>	<i>Black.</i>
34 to 39	25 to 23
28 to 19	13 to 24
37 to 31	26 to 28
33 to 4	Lost.

No 4.—14 to 14.

Whites at 27, 28, 32, 37, 38, 39, 40, 42, 43, 44,
45, 47, 48, 49.

Blacks at 2, 5, 7, 9, 10, 11, 12, 13, 14, 15, 16,
19, 26, 29.

<i>Whites.</i>	<i>Black.</i>
39 to 40	13 to 18
34 to 23	29 to 18
28 to 23	18 to 29
37 to 31	26 to 28,
27 to 21	16 to 27
38 to 32	28 to 37 \
42 to 4	Lost.

There is nothing extraordinary in the foregoing; but it shows how a game may be saved by the judicious sacrifice of a pawn. Good players alone estimate justly the value of a voluntary sacrifice; bad players, on the contrary, found their calculations upon numbers.

No 5.—15 to 15.

Whites at 14, 24, 25, 30, 32, 33, 35, 37, 38, 41, 42, 46, 47, 48, 49.

Blacks at 1, 3, 4, 5, 6, 7, 8, 11, 15, 16, 18, 21, 23, 26, 27.

Very complicated.

<i>Whites.</i>	<i>Black.</i>
14 to 10	5 to 14
24 to 20	15 to 24
30 to 10	4 to 15
33 to 29	23 to 34
37 to 31	26 to 28
38 to 32	27 to 38
42 to 2	Lost.

No. 6.—11 to 11.

Whites at 25, 29, 30, 34, 35, 36, 38, 40, 47, 48, 49.

Blacks at 3, 7, 10, 14, 15, 17, 18, 19, 20, 23, 26.

A beautiful combination.

<i>Whites.</i>	<i>Black.</i>
36 to 31	26 to 37
38 to 32	37 to 28
29 to 34	20 to 29
30 to 24	19 to 39
40 to 34	39 to 30
35 to 2	Lost.

SEVERAL ENDS OF GAMES.

EXAMPLE 1.

Whites at 30, queen, 15, 20, 35.

Blacks at 4, 37, queen.

The blacks are to play.

This is a most delicate position : the loss or the drawing of the game depends on the manner the black makes the first move—if well made, and that he takes care to avoid the only one that can make him lose, the game will be drawn. If he should play his queen to 46, which is the safest house compared with 41, 32, 28, and 23, he would lose ; it ought to be played either to 10, or 5, and let him avoid placing her below the white queen when she is at 30, and then it is impossible for the white to win.

Execution, shewing how it may be lost.

White.

Blacks.

37 to 46 30 at 24.

If at 5 Lost.

If either to 23, 28, 32,

37, 41 Then to 15 to 10.

If he takes with the pawn Retire the queen upon
30.

The result is evident.

EXAMPLE 2.

A surprising coup of 8 whites and 8 blacks, each having a queen. The whites have the move.

Blacks at 4, queen, 7, 13, 18, 21, 24.

Whites at 15, 25, 28, 31, 32, 38, 48, queen.

<i>Whites.</i>	<i>Blacks.</i>
25 to 20	14 to 25
28 to 23	18 to 29
32 to 27	21 to 43
48 to 33	4 to 47
33 to 24	47 to 20
15 to 24	Lost.

The beauty of this coup consist in the manner of taking and seizing the time necessary to win, by moving the white queen to 33 ; when the black queen 4, takes 4 to 47 ; white terminates the coup at 24.

EXAMPLE 3.

Position of 8 black and 8 white. White have the first move.

Blacks at 8, 10, 12, 13, 18, 25, 31, 37.

Whites at 23, 29, 30, 34, 35, 42, 47, 49.

<i>Whites.</i>	<i>Blacks.</i>
30 to 24	37 to 48
23 to 19	48 to 30
29 to 23	18 to 20
35 to 4 queen	13 to 24
4 to 36	Lost.

The above will be found instructive ; the disposition of the coup is, white 43 to 42, and black 32 to 37 ; a skilful hit on the part of the white.

EXAMPLE 4.

Position of 12 black and 12 white.

Black at 2, 4, 8, 9, 10, 13, 14, 17, 18, 19, 22, 28.

Whites at 24, 25, 27, 30, 31, 34, 36, 37, 38, 39, 46, 49.

<i>Whites.</i>	<i>Black.</i>
25 to 20	14 to 25
27 to 21	17 to 26
34 to 29	25 to 41
36 to 47	26 to 37
47 to 41	19 to 30
41 to 5 queen	30 to 35

Lost for the black. The pawn at 49 must be played to 44, and the next move, the queen, from 5 to 28. If the black pawn is played from 22 to 27, the game is lost without resource.

The disposition of the coup is, the white pawn at 43 played to 38, and the black from 23 to 28. Great nicety is required in playing the pawn at 3, for it is the key of the game.

ILLUSTRATIONS OF THE COUP DE REPOS.

No. 1.

Whites at 23, 29, 30, 31, 34, 35, 36, 48.

Blacks at 5, 7, 8, 9, 10, 12, 13, 18, 25, 26, 22.

<i>Whites.</i>	<i>Black.</i>
30 to 24	26 to 37
48 to 42	37 to 48
19 to 26	48 to 30
29 to 23	18 to 20
35 to 4	13 to 24
4 to 15	The result is evident.

It is obvious that the black pawn at 26, placed behind the white at 31, which is *en prise*, and which white allowed to be captured, gave him the time to dispose his game in such a manner as to ensure the victory.

No. 2.

Whites at 6, queen, 26, 30, 33, 34, 39, 43, 48.
 Blacks at 3, 4, 5, 9, 10, 15, 17, 19, 20, 22, 25,
 32, 37.

<i>Whites.</i>	<i>Blacks.</i>
48 to 42	37 to 48
33 to 28	22 to 44
6 to 41	48 to 39
34 to 43	25 to 34
41 to 50	Lost.

ILLUSTRATION OF THE MANNER IN WHICH THE COUP IS TO BE GAINED.

Black at 4, 12, 36, 41.

White at 23, 33, 42, 47, 49.

<i>Blacks.</i>	<i>Whites.</i>
41 to 46	23 to 18
12 to 23	33 to 28
23 to 32	42 to 37
32 to 41	49 to 43
4 to 9	43 to 39
9 to 14	38 to 33
14 to 20	33 to 29
20 to 25	29 to 24

Black can now no longer play without losing, because the white have gained the *coup*.

It would be superfluous to dwell any longer upon illustrations which may be varied *ad infinitum*. We shall, therefore, lay down a few maxims for their practical applications.

Play your pawns in such a manner that they may be neither too close or too much separated from one another. If too close, they will be

blocked up ; and if too much separated, cut off in detail. In the former case, endeavour to clear your game by exchanging ; in which, however, great circumspection must be observed. In the second case, concentrate your forces as rapidly as possible.

When you have lost a pawn which you cannot retake, endeavour to compensate for your loss by seizing an advantageous post, in which one pawn will hold two in check.

Reconnoitre well your adversary's position, and direct the mass of your forces upon his weakest point.

The great nicety at this game consists in playing the pawn, since it is with that piece that you gain the move. Before you execute a hit, therefore, combine well every part of it, and do not commence it until you are assured that the pawn which will take the last will not be for your adversary the means of making a hit himself. For it is not sufficient that the player combines his own moves skilfully ; he must study well those of his adversary ; for as soon as the object of a move is perceived, it is a lost one. When, therefore, you see that your adversary has penetrated your designs, renounce them and form some other.

Some good players are of opinion that it is less advantageous to make hits than to gain a good position ; as although your adversary may be of equal force to yourself, this equality ceases so soon as the position is gained by one of the parties.

When you have committed a fault which may occasion the loss of a pawn, and you remark that your adversary has not perceived it, endeavour to rectify your error immediately ; if, on the other hand, you perceive that your adversary has observed it, and that he is preparing to take advan-

tage of it, you must abandon it, and occupy yourself with another coup that may indemnify you for the loss.

Towards the end of a game, when there are but few pawns left on the board, concentrate them as rapidly as possible. At that period of the game the slightest fault is fatal.

With equal players the loss of a pawn may incline the victory to one side or the other : there are, however, several cases when one or more may be advantageously sacrificed. This may be adopted when there remains no other means of parrying a ruinous coup of the adversary, or of being blocked up.

If your adversary is eager to seize the corners, take up a position in the centre, and block him up. The position of the corners is, after all, a very doubtful one, for the player who occupies them has not, as in the centre of the board, the facility of playing to the right or the left. Five or six pawns frequently remain blocked up in the corners till the end of the game.

The queen is such a powerful piece that you must not hesitate to sacrifice one, two, or even three pawns for the sake of gaining a queen ; but in doing this great prudence must be observed. Assure yourself that the queen will be in safety, and in a position to recapture the pawns sacrificed without being taken herself. There is nothing so harassing as to have a queen opposed to you when you have none of that arm, arising from the rapidity of her march compared to that of the pawn ; when, therefore, a queen is captured under these circumstances, the coup is generally a brilliant one.

This game is played in various other ways, as follows :

1st. When two equal players give each other in turn at starting one, two, and sometimes three pawns for a queen. When one is stronger than the other he gives more pawns.

2dly. With five queens and four pawns against twenty pawns.

3dly. The diagonal game, in which the pawns are arranged in such a manner as to leave at the beginning of the game the central line open. This method is very amusing.

4thly. The Babylonian method, which is susceptible of more combinations than the game ordinarily played ; the pieces are not only moved backwards and forwards, but to the right and the left—in fact, in every direction. It was found, however, that a board with only 100 squares was too limited a field for the operations of this game, and that it would be also necessary to augment the number of the pawns, which is probably the reason why it is seldom or ever played.

VOCABULARY OF THE TERMS USED AT POLISH DRAUGHTS.

TO LOSE THE COUP is a game so disposed that your adversary cannot play without losing several pieces or the game.

COUP DE REPOS. A position in which one of the players has several pieces to take in succession, while his adversary has so many coups to play freely.

GREAT LINE. That which extends from 5 to 46.

The other terms are similar to those used at the ordinary game of draughts.

CRICKET.

THE LAWS, AS REVISED BY THE MARYLEBONE
CLUB IN THE YEAR 1830.

1. *The Ball.*—Must not weigh less than five ounces and a half, nor more than five ounces and three quarters. At the beginning of each innings, either party may call for a new ball.
2. *The Bat.*—Must not exceed four inches and one quarter in the widest part.
3. *The Stumps.*—Must be twenty-seven inches out of the ground ; the bails eight inches in length ; the stumps of sufficient thickness to prevent the ball from passing through.
4. *The Bowling Crease.*—Must be in a line with the stumps, six feet eight inches in length ; the stumps in the centre, with a return crease at each end, towards the bowler at right angles.
5. *The Popping Crease.*—Must be four feet from the wicket, and parallel to it.
6. *The Wickets.*—Must be pitched opposite to each other by the umpires, at the distance of twenty-two yards.
7. It shall not be lawful for either party during a match, without the consent of the other, to alter the ground by rolling, watering, covering, mowing, or beating. This rule is not meant to prevent the striker from beating the ground with his bat near where he stands during the innings, nor to prevent the bowler from filling up holes with sawdust, &c., when the ground shall be wet.
8. After rain the wickets may be changed with the consent of both parties.
9. *The Bowler.*—Shall deliver the ball with one foot behind the bowling crease : and within the

return crease, and shall bowl four balls before he change wickets, which he shall be permitted to do but once in the same innings.

10. The ball shall be bowled. If it be thrown or jerked, or if any part of the hand or arm be above the elbow at the time of the delivery, the umpire shall call "no ball."

11. He may order the striker at his wicket to stand on which side of it he pleases.

12. If the bowler toss the ball over the striker's head, or bowl it so wide that it shall be out of distance to be played at, the umpire (even although he attempt to hit it) shall adjudge one run to the parties receiving the innings, either with or without an appeal from them; which shall be put down to the score of wide balls, and such ball shall not be reckoned as any of the four balls.

13. If the bowler bowl a "no ball," the striker may play at it, and be allowed all the runs he can get; and shall not be put out, exempt by running out. In the event of no run being obtained by any other means, then one run shall be scored.

14. In the event of a change of bowling, no more than two balls shall be allowed in practice.

15. The bowler who takes the two balls shall be obliged to bowl four balls.

16. *The Striker is out.*—If the bail be bowled off, or the stump bowled out of the ground.

17. Or, if the ball, from a stroke of the bat, or hand, but not wrist, be held before it touch the ground, although it be hugged to the body of the catcher.

18. Or, if in striking, or at any other time while the ball shall be in play, both his feet be over the popping crease, and his wicket put down, except his bat be grounded within it.

19. Or, if in striking at the ball, he hit down his wicket.

20. Or, if, under pretence of running or otherwise, either of the strikers prevent a ball from being caught, the striker of the ball is out.

21. Or, if the ball be struck, and he wilfully strike it again.

22. Or, if, in running, the wicket be struck down by a throw, or by the hand or arm, (with ball in hand) before his foot, hand, or bat be grounded over the popping crease. But, if the bail be off, the stump must be struck out of the ground.

23. Or, if any part of the striker's dress knock down the wicket.

24. Or, if the striker touch, or take up the ball while in play, unless at the request of the other party.

25. Or, if, with any part of his person, he stop the ball, which, in the opinion of the umpire at the bowler's wicket, shall have been delivered in a straight line to the striker's wicket, and would have hit it.

26. If the players have crossed each other, he that runs for the wicket which is put down is out.

27. When a ball shall be caught, no run shall be reckoned.

28. When a striker shall be run out, the run which they were attempting shall not be reckoned.

29. If a lost ball shall be called, the striker shall be allowed six runs; but, if more than six shall have been run before lost ball shall have been called, then the striker shall have all which have been run.

30. When the ball has been in the bowler's, or wicket-keeper's hands, it is considered as no

longer in play ; and the strikers need not keep within their ground till the umpire has called "*play* ;" but, if the player go out of his ground with an intent to run before the ball be delivered, the bowler may put him out.

31. If the striker be hurt, he may retire from his wicket, and return to it at any time in that innings.

32. If a striker be hurt, some other person may be allowed to stand out for him, but not to go in.

33. No substitute in the field shall be allowed to bowl, keep wicket, stand at the point, or middle wicket, or stop behind to a fast bowler, unless with the consent of the adverse party. The umpires shall enforce this law.

34. If any person stop the ball with his hat, the ball shall be considered dead, and the opposite party shall add five runs to their score ; if any be run, they shall have five in all.

35. If the ball be struck, the striker may guard his wicket either with his bat or his body.

36. *The Wicket Keeper*.—Shall stand at a reasonable distance behind the wicket, and shall not move till the ball be out of the bowler's hand, and shall not by any noise incommodate the striker ; and if any part of his person be over or before the wicket, although the ball hit it, the striker shall not be out.

37. *The Umpires*.—Are sole judges of fair and unfair play ; and all disputes shall be determined by them, each at his own wicket ; but, in case of a catch, which the umpire at the wicket bowled from, cannot see sufficiently to decide upon, he may apply to the other umpire, whose opinion is conclusive.

38. The umpires in all matches shall pitch fair

wickets, and the parties shall toss for the choice of innings.

39. They shall allow two minutes for each man to come in, and fifteen minutes between each innings. When the umpires shall call "*play*," the party refusing to play, shall lose the match.

40. They are not to order a player out, unless appealed to by the adversaries.

41. But, if the bowler's foot be not behind the bowling crease, within the return crease, when he shall deliver the ball, they must unasked call "*no ball*."

42. If the striker run a short run, the umpire must call "*one short*."

43. The umpires are not to be changed during the match, but by the consent of both parties.

LAWS FOR SINGLE WICKET.

1. When there shall be less than five players on a-side, bounds shall be placed twenty-two yards each in a line from the off and leg stump.

2. The ball must be hit before the bounds to entitle the striker to a run ; which run cannot be obtained, unless he touch the bowling stump or crease in a line with it with his bat, or some part of his person ; or go beyond them ; returning to the popping crease, as at double wicket, according to the 22d law.

3. When the striker shall hit the ball, one of his feet must be on the ground, and behind the popping crease, otherwise the umpire shall call "*no hit*."

4. When there shall be less than five players on a-side, neither byes nor overthrows shall be allowed ; nor shall the striker be caught out behind the wicket, nor stumped out.

5. The field's man must return the ball so that it shall cross the play between the wicket and the bowling stump, or between the bowling stump and the bounds; the striker may run till the ball shall so be returned.

6. After the striker shall have made one run, if he start again, he must touch the bowling stump, and turn before the ball shall cross the play to entitle him to another.

7. The striker shall be entitled to three runs for lost ball, and the same number for ball stopped with hat; with reference to the 29th and 34th laws of double wicket.

8. When there shall be more than four players on a-side, there shall be no bounds. All hits, byes, and overthrows, shall then be allowed.

9. The bowler is subject to the same laws as at double wicket.

10. Not more than one minute shall be allowed between each ball.

BETS.

If the runs of one player be laid against those of another, the bets depend on the first innings, unless otherwise specified.

If the bets be made upon both innings, and one party beat the other in one innings, the runs in the first innings shall determine the bet.

But if the other party go in a second time, then the bet must be determined by the number on the score.

GOFF, OR GOLF.

THIS favourite summer amusement in Scotland is played with clubs and balls. The club is taper, terminating in the part that strikes the ball, which part is faced with horn, and loaded with lead. There are six sorts of clubs used by good players; namely, the *common club*, used when the ball lies on the ground; the *scraper*, and *half-scraper*, when in long grass; the *spoon*, when in a hollow; the *heavy iron club*, when it lies deep among stones or mud; and the *light iron ditto*, when on the surface of chingle or sandy ground. The balls are considerably smaller than those used at cricket, but much harder; being made of horse leather, stuffed with feathers in a peculiar manner, and boiled.

The ground may be circular, triangular, or a semi-circle. The number of holes are not limited: always depending on what the length of the ground will admit. The general distance between one hole and another is about a quarter of a mile, which commences and terminates every game; and the party who gets the ball in by the fewest number of strokes is the victor.

Two, or as many more as choose, may play together, but what is called the good game never exceeds four; that number being allowed to afford the best diversion, and is not so liable to confusion as a greater number. The more rising or uneven the ground, the greater nicety or skill is required in the players: on which account the preference is always given to such ground by proficients.

Light balls are used when playing with the wind, and heavy ones against it. At the begin-

ning of each game the ball is allowed to be elevated to whatever height the player chooses, for the convenience of striking, but not afterwards. This is done by means of sand or clay, called a *teeing*. The balls which are played off at the beginning of the game must not be changed until the next hole is won, even if they should happen to burst. When a ball happens to be lost, that hole is lost to the party ; and if a ball should be accidentally stopped, the player is allowed to take his stroke again.

Suppose four are to play the game, A and B against C and D, each party having a ball, they proceed thus : A strikes off first—C next ; but perhaps does not drive his ball above half the distance A did, on which account D, his partner, next strikes it, which is called *one more*, to get it as forward as that of their antagonist, or as much beyond it as possible ; if this be done, then B strikes A's ball, which is called playing the *like*, or equal of their opponents. But if C and D, by their ball being in an awkward situation, should not be able, by playing *one more*, to get it as forward as A's, they are to play in turn, *two, three*, or as many more, until that is accomplished, before B strikes his partner's ball : which he calls *one to two* or *one to three*, or as many strokes as they required to get to the same distance as A did by his once playing. The ball is struck alternately, if the parties be equal, or nearly so.

TENNIS.

A TENNIS COURT is usually ninety-six or ninety-seven feet long, by thirty-three or thirty-four in breadth. A net hangs across the middle, over which the ball must be struck, to make any stroke good. At the entrance of a tennis-court there is a long covered passage before the dedans, the place where spectators usually are, into which, whenever a ball is played, it counts for a certain stroke. This long passage is divided into different apartments, which are called galleries, *viz.*, from the line towards the dedans, is the first gallery ; door, second gallery ; and the last gallery, is what is called the service-side. From the dedans to the last gallery are the figures 1, 2, 3, 4, 5, 6, each at a yard distance, marking the chases, one of the most essential parts of this game. On the other side of the line is the first gallery ; door, second gallery ; and last gallery, what is called the hazard-side ; every ball played into the last gallery on this side tells for a certain stroke, the same as into the dedans. Between the second and this last gallery are the figures 1, 2, marking the chaces on the hazard-side. Over this long gallery is the pent-house, on which the ball is played from the service side to begin a set of tennis, and if the player should fail striking the ball (so as to rebound from the pent-house), over a certain line on the service-side, it is reckoned a fault ; and two such faults following are counted for a stroke. If the ball pass round the pent-house, on the opposite side of the court, and fall beyond a particular described line, it is called *passe*, goes for nothing, and the player is to serve again.

On the right-hand of the court from the dedans, a part of the wall projects more than the rest, in order to make a variety in the stroke, and render it more difficult to be returned by the adversary, and is called the tambour; the grill is the last thing on the right-hand, in which, if the ball be struck, is reckoned fifteen, or a certain stroke.

A set of tennis consists of six games, but if what is called an advantage set be played, two successive games above five games must be won to decide; or in case it should be six games all, two games must still be won on one side to conclude the set.

When the player gives his service in order to begin the set, his adversary is supposed to return the ball wherever it falls after the first rebound, untouched; for example; if at the figure 1, the chace is called at a yard, that is to say, at a yard from the dedans, this chace remains till a second service is given, and if the player on the service-side should let the ball go after his adversary returns it, and the ball fall on or between any one of these figures, they must change sides, for he will be then on the hazard-side to play for the first chace, which if he win by striking the ball so as to fall, after its first rebound, nearer to the dedans than the figure 1, without his adversary being able to return it from its first rebound, he wins a stroke, and then proceeds in like manner to win a second stroke, &c. If a ball fall on a line with the first gallery, door, second gallery, or last gallery, the chace is likewise called at such or such a place, naming the gallery, &c. When it is just put over the line, it is called a chace at the line. If the player on the service-side return a ball with such force as to strike the wall on the hazard-side, so as

to rebound, after the first hop, over the line, it is also called a chace at the line.

The chaces on the hazard-side proceed from the ball being returned either too hard, or not hard enough : so that the ball, after its first rebound, falls on this side the line which describes the hazard-side chaces, in which case it is a chace at 1, 2, &c., provided there be no chace depending, and according to the spot where it exactly falls. When they change sides, the player, in order to win this chace, must put the ball over the line any where, so that his adversary does not return it. When there is no chace on the hazard-side, all balls put over the line from the service-side, without being returned, reckon.

The game, instead of being marked, one, two, three, four, is called for the first stroke, *fifteen*; for the second, *thirty*; for the third, *forty*; and for the fourth, *game*, unless the players get four strokes each; then, instead of calling it *forty all*, it is called *deuce*, after which, as soon as any stroke is got, it is called *advantage*; and in case the strokes become equal again, *deuce again*; till one or the other gets two strokes following, to win the game.

The odds at this game are very uncertain, on account of the chances; and various methods of giving odds have been used to render a match equal.

A *bisque*, is the lowest odds given (except choice of the sides), and is the liberty of scoring a stroke whenever the player, who receives the advantage, chooses; for example, let a game be forty to thirty, he who is forty by taking the *bisque* becomes game.

Fifteen, is a stroke given at the beginning of a game.

Half thirty, is fifteen given the first game, and thirty the second ; and so on to the whole *thirty, forty, &c.*

Half-court, is confining the player to play into the adversary's half-court, and is of great advantage to the adversary.

Touch no wall, is another great advantage given to the adversary.

Round service, is serving the ball round the pent-house.

Barring the hazards, is not reckoning the dedans, tambour, grill, or the last gallery, or the hazard-side, &c.

The odds generally laid, making allowance for particular circumstances, are as follow :—

The first stroke being won between even players, that is, fifteen love, the odds are,

Of the single game.....	7 to 4
Thirty love.....	4 to 1
Forty love.....	8 to 1
Thirty to fifteen.....	2 to 1
Forty to fifteen.....	5 to 1
Forty to thirty.....	3 to 2

The odds of a four game set, when the first game is won, are.....

When two games love.....	7 to 4
Three games love.....	4 to 1
When two games to one.....	8 to 1
Three games to one	2 to 1

The odds of a six game set, when the first game is won, are.....

When two games love.....	3 to 2
Three games love.....	2 to 1
Four games love	4 to 1
Five games love	10 to 1

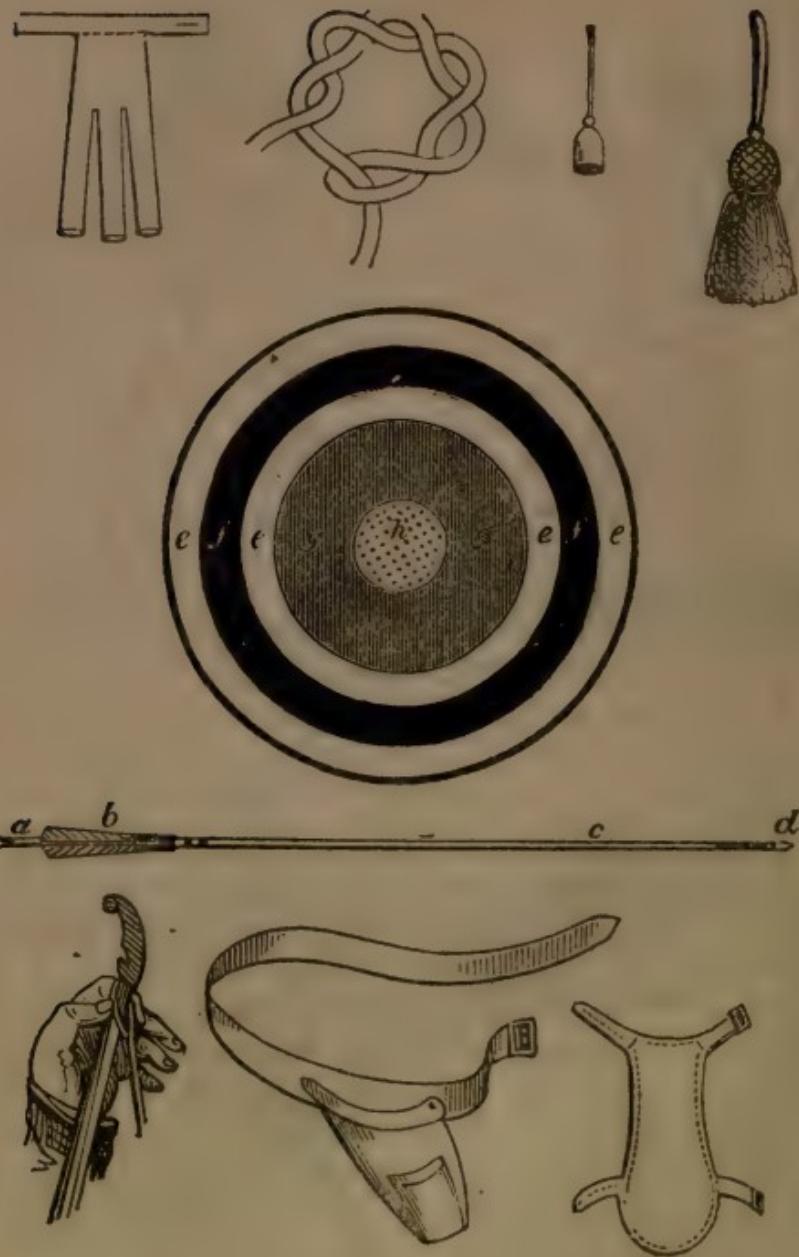
When two games to one.....

Three games to one	8 to 5
Two games to one	5 to 2

When four games to one	5 to 1
Five games to one.....	15 to 1
When three games to two.....	7 to 4
Four games to two.....	4 to 1
Five games to two.....	10 to 1
When four games to three.....	2 to 1
Five games to three	5 to 1
The odds of an advantage set, when the first game is won, are	5 to 4
When two games love.....	7 to 4
Three games love	3 to 1
Four games love.....	5 to 1
Five games love	15 to 1
When two games to one.....	4 to 3
When three games to one.....	2 to 1
Four games to one.....	7 to 2
Five games to one	10 to 1
When three games to two.....	3 to 2
Four games two	3 to 1
Five games to two	8 to 1
When four games to three	8 to 5
Five game games to three	3 to 1
When five games to four.....	2 to 1
When six games to five	5 to 2

ARCHERY.





THE principal instruments of archery are the bracer—the shooting glove—the string—the bow, and the shaft; to which are added a belt, a tassel, and a grease pot. The use of the bow, the string

and the shaft, sufficiently speak for themselves; the bracer is used to save the arm from the stroke of the string; the glove to prevent the excoriation of the fingers; the tassel to wipe off the dirt from the shaft when taken from the ground; and the grease-pot to hold a composition of suet and white wax, to rub occasionally on the fingers of the glove to render them pliable.

The five points of archery as laid down by Asham, our most classical authority upon the use of the long bow, and to whose treatise we must refer our readers (for the instructions which want of space, in a work of the nature of the present, prevent our giving) are,

Standing — nocking — drawing — holding and loosing. When the learner has acquired ease and dexterity in all these, he may then proceed to fire at a mark. In modern archery the shortest distance is twenty yards. The archer then proceeds to sixty, which last is considered to be the key to all lengths. We rather prefer for practice the Oriental method, according to which the learner commences at ten yards, at which he becomes so expert as to hit the smallest mark at that range.

The next thing to be considered is the elevation,* which of course must depend on the strength of the arm of the archer, the distance, the power of the bow, &c., and which can only be acquired by practice. Thirty yards are considered a point-blank range; but if the bow be weak, a trifling elevation must be allowed. The direction and the force of the wind require the nicest consideration in order to calculate the allowance to be made for that element, and likewise your footing, by which

* The greatest elevation is 45 degrees, but when this should begin must depend upon distance, strength, and the spring of the bow.

you may counteract its effects. Thus it will be felt that precept alone will never form an archer ; and that proficiency in the use of the weapon is only to be acquired by early training and practice, based upon sound mathematical theory.

There are six different kinds of shooting with the long bow, *viz.*, roving—hoyle shooting—flight shooting—butt shooting—target shooting, and clout shooting.

Target shooting being that which is most in vogue with our modern toxopholites, we shall confine our observations solely to that branch of archery.

TARGET SHOOTING.

Modern targets are made of oil-cloths divided into coloured circles. Centre gold, then red, the third white (inner white), the fourth black, and the exterior circle (the outer white). All beyond the last division is named the petticoat ; the target is sewed upon a boss of straw, twisted as for bee-hives.

ORDER OF THE GAME.

In ordinary shooting, colour stamps no particular value upon the hit, but every hit in any colour counts one. At other times, as in prize shooting, the first shot in the *gold*, or the *nearest centre shot during the shooting, wins* ; and sometimes every colour bears a proportionate value. Thus a shot in the gold counts 9, in the red 7, in the inner white 5, in the black 3, and in the outer white 1, the exterior circle being nine times larger than the interior one, and the same proportion being observed in calculating the value of each circle. The centre shot gives

the title of captain, the second of lieutenant of the target; the greatest number of hits gives the title of captain, and the second lieutenant of the numbers.

The modern target distance is one hundred yards, anciently it was much greater; in 1583 it was seven score and eight yards. At the Finsbury yearly meeting, the first trial used to be at a distance of eleven score yards. And at every two or three trials it was reduced ten yards, until it reached eight score. The size of the target ought of course to vary in ratio to the distance; at sixty yards its dimensions should be two feet; at eighty yards, three feet; and at one hundred yards, four feet in diameter.

RULES OF THE GAMES.

The Finsbury rule allowed an arrow to reckon in that ring broken or depressed near the centre; but in the toxopholite ground, an arrow when it divides two colours, reckons in the colour farthest from the centre. If in measuring a shoot, the difference is so small, that it cannot be decided, the competitor who wins the next best shot is the victor.

If your arrow breaks, you may measure from the nearest end that has wood and head, or wood and feather.

If you have any mishap, as in nocking, &c., if you can reach your arrow with your bow, you may shoot again.

Arrows are weighed by troy weight, three arrows make a pair. The mean length of the modern bow is five feet nine inches, that of the shaft twenty-nine to twenty-seven inches. The following is the scale of weight of arrows according to distance:—

	<i>s. d.</i>	<i>s. d.</i>
At 30 yards	about 5 0 to 0 0	
60	3 6 to 5 6	
90 }		
120 }	3 0 to 4 6	

Observe, That as arrows are weighed by the same weight as standard silver, five shillings troy weight is termed an arrow of five shillings.

The above dimensions it will of course be felt are not arbitrary, as every one will use an arrow the best suited to his strength, and the best adapted to the nature and power of his bow.

Long after the bow was banished from[¶] the ranks of war in our European armies, it continued to be in this country a fashionable amusement of much value. But even as an amusement, till within the last twenty years, it had for a century past been little known. The archers' division of the artillery company in the south, and one or two societies in Lancashire and Cheshire, and the royal company of archers in Scotland, were for many years the sole support of the art in Great Britain. The last-mentioned society was founded in the reign of James the First. They still, on all occasions of a royal visit to Edinburgh, claim the privilege of forming the body-guard of the sovereign. Their uniform is tartan, lined with white, and trimmed with green; a white sash with green tassels, and a blue bonnet with a St. Andrew's cross and feather. This company includes a great proportion of Scottish nobility and gentry.

Notwithstanding all that has been advanced to the contrary, the projectile power of the bow, it must be admitted upon dispassionate consideration, is vastly inferior to the modern firelock. First, because it is impaired by the state of the atmosphere, in some state of which it cannot be applied with

effect, moisture weakening the elasticity of the bow, and relaxing the string. Secondly, by the direction and intensity of the wind. Except in a very moderate wind, the best archer cannot shoot straight ; and in boisterous weather especially, with a slant of wind, the weapon is next to useless. But even in the most favourable state of the air, it is difficult to calculate the projectile force of arrows ; in passing through the air they lose much more of their velocity than a ball projected from a musket, because they have less density, and present a greater surface ; and, for the same reason, their deflection from the parabolic curve must also be greater, independently of the force and direction of the wind. Again, the range of a firelock is four times greater than that of a bow, and the impetus is also much more uniform.

But even in modern warfare there are instances when the bow might be used with great effect. Many French officers, after the Russian campaign, bore testimony to the great utility of this weapon in cases of ambush, and desultory surprises of small bodies of men, particularly at night. Again, in the defence of narrow streets, and in all cases where a multiplied fire, rather than extent of range, is required, the bow might be still used with advantage ; and the importance of this consideration will be felt when the rapidity of its fire is recollected ; and, moreover, that it might be used by women and children, who are generally terrified by the detonation and the recoil of fire-arms. The extraordinary feats of archery which we read of in the works of the military writers of antiquity and of the middle ages, are but too often considered as romantic fictions ; and to this opinion we also were converts, until we witnessed the almost superhuman skill

of the Indians of Brazil in the use of the bow, particularly the *Botocudas*, whose bows are eight feet long, and arrows six. However, one insuperable obstacle in modern times in imparting to the bow all the intensity of which it is susceptible, is, that the archer must be rendered physically adapted to it by training from early infancy. We hail, however, with pleasure the revival of this old English sport : of its conduciveness to health all medical writers speak in terms of the highest commendation ; it likewise powerfully develops the muscles, expands the chest, and imparts a firm and graceful carriage to the figure—recommendations which cannot fail to render the sport a favourite with both sexes.

EXPLANATION OF SOME OF THE TERMS USED IN ARCHERY.

STANDING. The position of the archer.

NOCKING. The placing the arrow in the string.

HOLDING. The act of holding the string when drawn up.

DRAWING. The act of drawing the string to the ear.

LOOSING. Letting go the string.

GAME COCKS.

GENERAL ORDERS AND RULES FOR COCKING.

ON the weighing morning, that person whose chance is to weigh last, is to set his cocks and number his pens, both main and byes, and leave the key of the pens upon the weighing table (or the other party may put a lock on the door), before any cock is put into the scale ; and after the first pack of cocks is weighed, a person appointed by him that weighed first shall go into the other pens, to see that no other cocks are weighed but what are so set and numbered, provided they are within the articles of weight that the match specifies ; if not, to take the following cock or cocks until the whole number of main and bye cocks are weighed through. After they are all weighed, proceed as soon as possible to match them, beginning at the least weight first, and so on ; and equal weights or nearest weights are to be separated, provided by that separation a greater number of battles can be made. All blanks are to be filled up on the weighing day, and the battles divided and struck off for each day's play, as agreed on, and the cocks that weigh the least are to fight the first day, and so upwards.

At the time agreed on by both parties, the cocks that are to fight the first battle are brought upon the pit by the feeders, or their helpers ; and after being examined, to see whether they answer the marks and colours specified in the match bill, they are given to the setters-to, who, after chopping them in hand, give them to the masters of the match (who always sit opposite to each

other), when they turn them down upon the mat ; and the setters-to are not to touch them, except they either hang in the mat, or in each other, or get close to the edge of the pit ; until they have left off fighting, while a person can tell forty. When both cocks leave off fighting, until one of the setters-to, or a person appointed for telling the law can tell forty gradually ; then the setters-to are to make the nearest way to their cocks, and as soon as they have taken them up, are to carry them into the middle of the pit, and immediately deliver them on their legs beak to beak, and not touch them any more until they have refused fighting, so long as the teller of the law can tell ten, unless they are on their backs, or hung in each other, or in the mat ; then they are to set-to again in the same manner as before, and continue it till one cock refuses fighting ten several times, one after another, when it is that cock's battle that fought within the law. But it sometimes happens that both cocks refuse fighting while the law is telling : when this happens, a fresh cock is to be hovelled, and brought upon the mat as soon as possible, and the setters-to are to toss up which cock is to be set-to first, and he that gets the chance is to choose. Then the cock who is to be set-to last must be taken up, but not carried off the pit ; next setting the hovelled cock down to the other, five separate times, telling ten between each setting-to, and then the same to that which had been taken up ; and if one fights and the other refuses, it is a battle to the fighting cock ; but if both fight, or both refuse, it is a drawn battle. The reason of setting-to five times to each cock is, that ten times setting-to being the long law, so on their both refusing, the law is to be equally divided between them.

Another way of deciding a battle is, if any person should offer to lay ten pounds to a crown, and no person take it until the law-teller tells forty, and calls out three several times, "Will any one take it?" and if no one should take it, it is the cock's battle the odds are laid on, and the setters-to are not to touch the cocks during the time the forty is telling, unless either cock is hung in the mat, or on his back, or hung together. If a cock should die before the long law is told out, although he fought in the law, and the other did not, he loses his battle.

There are frequently disputes in setting-to in the long law, for often both cocks refuse fighting until four or five, or more or less times, are told; then they sometimes begin telling from that cock's fighting, and counting but once refused, but they should continue their number on, until one cock has refused ten times: for when the law is begun to be told, it is for both cocks; and if one cock fight within the long law, and the other not, it is a battle to the cock that fought, counting from the first setting-to. All disputes about bets, or the battle being won or lost, ought to be decided by the spectators. The crowing and mantling of a cock, or fighting at the setter-to's hand before he is put to the other cock, or breaking from his antagonist, is not allowed as a fight.

RULES OBSERVED AT THE ROYAL COCK-PIT, WEST-MINSTER.

1. That every person show and put his cock into the pit with a fair hacle, not too near shorn, or out, nor with any other fraud.
2. That every cock fight as he is first shown in

the pit, without sheering or cutting any feathers afterwards, except with the consent of both the masters of the match.

3. When both cocks are set down to fight, and one of them runs away before they have struck three mouthing blows, it is adjudged *do battle* no the persons who bet.

4. No persons to set-to, but those who are appointed by the masters of the match.

5. When a cock shall come setting-to, and both cocks refuse to fight ten times successively according to the law, then a fresh cock shall be hovelled, and the masters of the match must agree which of them shall turn the cock down : after that, if both fight, or both refuse, to be deemed a drawn battle ; but if one should fight, and the other refuse, the battle to be allowed won by the fighting cock.

6. After the person appointed by the masters to tell the law shall have told twice twenty, the cocks to be set-to, beak to beak, if they both see, but if either be blind, then the blind cock to touch, and on their refusing to fight, the person appointed as before is to tell ten between each setting-to, till one of the cocks has refused fighting ten times successively.

7. When ten pounds to a crown are laid on the battle, and not taken, after twice twenty is told the battle is determined as won by that cock the odds are on.

8. That no person shall make any cavil or speech about matching of cocks, either to matchers or owners, after the cocks are once put together.

9. A master of the match has a right to remove any person out of the lower ring.

10. No person can make a confirmed bet void, without mutual consent.

11. Bets to be paid on clear proof by creditable witnesses, even though they have not been demanded immediately after the battle is over.

12. It is recommended, that all disputes be finally determined by the masters of the match, and two other gentlemen whom they shall appoint: and in case the four cannot agree, then they shall fix on a fifth, whose determination shall be final.

METHOD OF TREATING A COCK AFTER FIGHTING.

The battle being ended, immediately search the cock's wounds, and suck the blood out; then wash them well with warm urine, which will keep them, from rankling; after this, give him a roll or two of best scouring, and stove him up as hot as possible for that night. In the morning, if his head be swelled, suck his wounds, and wash them with warm urine again; then take the powder of herb robert, put into a fine bag, and pounce his wounds with the same; after this give him to eat a good handful of bread out of warm ale, so put him into the stove once more, and let him not feel the air till the swelling has subsided. If he have received any hurt in the eyes, take some leaves of ground-ivy, that which grows in little tufts in the bottom of hedges, and has a small rough leaf, chew them, and spit the juice into the eyes of the cock; and this will prevent the growth of films, haws, warts, or the like blemishes destructive to the eye-sight. If in a month or two after the wounded cocks are put out to the walks, there appear about their heads any swoln bunches, hard and blackish at one end, it is certain that in such bunches there are unsound cores, which should be opened, and crushed out with the thumbs; then the matter

must be sucked out, and the holes filled full of fresh butter.

ARTICLES FOR A COCK MATCH.

Articles of agreement made the _____ day of _____ One thousand eight hundred and _____ between _____

First, the said parties have agreed, that each of them shall produce, show, and weigh, at the _____ on the _____ day of _____ beginning at the hour of _____ in the morning, _____ cocks, none to be less than three pounds six ounces, nor more than four pounds eight ounces, and as many of each party's cocks that come within one ounce of each other shall fight for _____ a battle, that is, _____ each cock; in as equal divions as the battles can be divided into six pits, or day's play at the cock-pit before mentioned; and the party's cocks that win the greatest number of battles, matched out of the number before specified, shall be entitled to the sum of _____ odd battle money, and the sum to be staked into the hands of Mr. _____ before any cocks are pitted, by both parties. And we further agree, to produce, show, and weigh, on the said weighing days, _____ cocks for bye battles, subject to the same weight as the cocks that fight in the main, and these to be added to the number of main cocks unmatched, and as many of them as come within one ounce of each other shall fight for _____ a battle; the number of cocks so matched, to be as equally divided as possible, and added to each day's play with the main cocks; and it is also agreed, that the balance of the battle-money shall be paid at the end of each day's play. It is also further

agreed, for the cocks to fight in silver spurs, and with fair hackles, and to be subject to all the usual rules of cock-fighting as practised at the Cock-Pit Royal, Westminster, and the profits arising from the spectators, to be equally divided between both parties, after all charges are paid that usually happen on those occasions.

Witness our hands the _____ day of _____

Witness _____

KEY TO A MATCH BILL.

A. B.'s Cocks.	C. D.'s Cocks.	A. B.'s lb. oz.	C. D.'s lb. oz.
3	6		10
	1		1
2			2
3			3
—			—
7			11
1			1
2			2
3			3
—			—
8	3		12
1			1
2			2
3			3
—			—
9			13
1			1
2			2
3			3
—			—
		2 Q 2	

GAME COCKS.

A. B.'s Cocks.	C. D.'s Cocks.	A. B.'s Cocks.	C. D.'s Cocks.
<i>lb.</i>	<i>oz.</i>	<i>lb.</i>	<i>oz.</i>
14			4
1			1
2			2
3			3
—			—
15			5
1			1
2			2
3			3
—			—
4	0	4	6
	1		1
	2		2
	3		3
—			—
1			7
1			1
2			2
3			3
—			—
4	2		8
	1		
	2		
	3		
—			
3			
1			
2			
3			
—			

N.B. Place the number the cock weighed in each column, in a parallel line against his weight.

CALCULATIONS FOR COCKING.

Battles.		Odds.	
3	out of 4	$2\frac{1}{5}$	to 1
4	..... 5	$4\frac{1}{3}$	.... 1
4	..... 6	$1\frac{9}{11}$	.... 1
5	..... 6	$8\frac{1}{7}$	.... 1
5	..... 7	$3\frac{1}{2}\frac{2}{9}$	.... 1
6	..... 7	15	.... 1
4	..... 8	$1\frac{7}{9}\frac{0}{3}$	.... 1
6	..... 8	$5\frac{3}{3}\frac{4}{7}$	.... 1
7	..... 8	$27\frac{4}{5}$	.... 1
6	..... 9	$2\frac{1}{3}\frac{2}{0}$	.... 1
7	..... 9	$10\frac{6}{4}\frac{6}{5}$	.... 1
8	..... 9	$50\frac{1}{5}$	.... 1
6	..... 10	$1\frac{2}{3}\frac{5}{8}\frac{2}{5}$	.... 1
7	..... 10	$4\frac{1}{3}\frac{4}{6}$	.... 1
8	..... 10	$17\frac{1}{5}\frac{6}{6}$	.... 1
9	..... 10	$92\frac{1}{1}\frac{1}{1}$	.... 1
7	..... 11	$2\frac{3}{5}\frac{6}{6}\frac{2}{2}$	.... 1
8	..... 11	$7\frac{1}{2}\frac{9}{3}\frac{2}{2}$	.... 1
9	..... 11	$29\frac{3}{6}\frac{8}{7}$	.... 1
10	..... 11	$169\frac{8}{1}\frac{2}{2}$	.... 1
7	..... 12	$1\frac{9}{1}\frac{2}{5}\frac{4}{8}\frac{4}{6}$	.... 1
8	..... 12	$4\frac{1}{7}\frac{2}{9}\frac{6}{4}$	.... 1
9	..... 12	$12\frac{2}{2}\frac{0}{9}\frac{9}{9}$	.... 1
10	..... 12	$50\frac{6}{7}\frac{7}{9}$	.... 1
11	..... 12	$314\frac{1}{1}\frac{3}{3}$	.... 1
8	..... 13	$2\frac{2}{5}\frac{6}{9}\frac{3}{5}$	.... 1
9	..... 13	$6\frac{5}{1}\frac{1}{0}\frac{9}{1}\frac{1}{3}$	.... 1
10	..... 13	$20\frac{1}{1}\frac{2}{8}\frac{7}{9}$	.... 1
11	..... 13	$18\frac{1}{2}\frac{1}{3}$	.... 1
12	..... 13	$584\frac{1}{7}$	.... 1
8	..... 14	$1\frac{6}{1}\frac{0}{5}\frac{8}{1}\frac{9}{9}$	.... 1
9	..... 14	$3\frac{2}{3}\frac{4}{4}\frac{9}{7}\frac{2}{3}$	.... 1
10	..... 14	$10\frac{2}{1}\frac{0}{4}\frac{3}{7}\frac{1}{1}$	.... 1
11	..... 14	$33\frac{2}{2}\frac{9}{3}\frac{2}{6}$	.... 1

GAME COCKS.

Battles.	Odds.
12 out of 14	is.....
12 out of 14	153 $\frac{3}{10}\frac{0}{3}$ to 1
13 14	1091 $\frac{1}{15}$ ....1
9 15	2 $\frac{2}{9}\frac{0}{9}\frac{2}{4}\frac{1}{5}$ ....1
10 15	5 $\frac{3}{4}\frac{0}{9}\frac{1}{4}\frac{1}{4}$ ....1
11 15	15 $\frac{7}{9}\frac{1}{4}\frac{2}{1}$ ....1
12 15	55 $\frac{5}{5}\frac{1}{6}$ ....1
13 15	269 $\frac{9}{12}\frac{8}{1}$ ....1
14 15	2047 ....1
9 16	1 $\frac{1}{2}\frac{2}{6}\frac{8}{0}\frac{7}{3}\frac{0}{3}$ ....1
10 16	3 $\frac{5}{14}\frac{9}{8}\frac{6}{9}\frac{4}{3}$ ....1
11 16	8 $\frac{3}{6}\frac{8}{8}\frac{7}{5}\frac{1}{5}$ ....1
12 16	25 $\frac{9}{25}\frac{4}{7}\frac{1}{1}$ ....1
13 16	93 $\frac{1}{6}\frac{8}{9}\frac{7}{7}$ ....1
13 16	477 $\frac{5}{13}\frac{0}{7}$ ....1
15 16	3854 $\frac{1}{17}$ ....1
10 17	1 $\frac{3}{2}\frac{6}{0}\frac{9}{6}\frac{2}{1}\frac{3}{3}$ ....1
11 17	5 $\frac{2}{10}\frac{9}{8}\frac{2}{8}\frac{3}{9}$ ....1
12 17	12 $\frac{4}{17}\frac{1}{0}\frac{2}{1}\frac{3}{1}$ ....1
13 17	39 $\frac{1}{6}\frac{2}{6}\frac{5}{7}$ ....1
14 17	156 $\frac{6}{11}\frac{7}{7}$ ....1
15 17	850 $\frac{9}{77}$ ....1
16 18	7280 $\frac{7}{5}$ ....1
10 18	1 $\frac{4}{10}\frac{8}{7}\frac{6}{6}\frac{2}{0}$ ....1
11 18	3 $\frac{1}{5}\frac{0}{3}\frac{1}{0}\frac{2}{0}\frac{8}{4}$ ....1
12 18	7 $\frac{1}{3}\frac{2}{1}\frac{7}{1}\frac{9}{8}\frac{4}{0}$ ....1
13 18	19 $\frac{9}{12}\frac{8}{6}\frac{2}{1}\frac{4}{6}$ ....1
14 18	63 $\frac{4}{9}\frac{0}{8}\frac{7}{8}\frac{2}{8}$ ....1
15 18	264 $\frac{3}{9}\frac{2}{8}\frac{4}{8}$ ....1
16 18	1523 $\frac{1}{17}\frac{6}{2}$ ....1
17 18	13796 $\frac{1}{19}$ ....1
11 19	2 $\frac{5}{8}\frac{7}{4}\frac{4}{8}\frac{5}{8}\frac{5}{3}$ ....1
12 19	4 $\frac{6}{11}\frac{6}{7}\frac{7}{7}\frac{1}{3}$ ....1
13 19	10 $\frac{1}{10}\frac{0}{6}\frac{6}{3}\frac{3}{9}$ ....1
14 19	30 $\frac{9}{20}\frac{3}{8}\frac{8}{3}$ ....1
15 19	103 $\frac{1}{12}\frac{3}{5}\frac{6}{9}$ ....1
16 19	450 $\frac{1}{4}\frac{4}{5}$ ....1

Battles.	Odds.
17 out of 19	is..... $2743\frac{8}{9}\frac{4}{1}$ to 1
18 19	$26213\frac{3}{5}$ ....1
11 20	$1\frac{1}{4}\frac{8}{3}\frac{4}{1}\frac{7}{9}\frac{5}{6}$ ....1
12 20	$2\frac{2}{2}\frac{5}{6}\frac{6}{7}\frac{2}{9}\frac{6}{5}$ ....1
13 20	$6\frac{8}{1}\frac{2}{3}\frac{7}{9}\frac{2}{8}\frac{6}{5}$ ....1
14 20	$16\frac{2}{6}\frac{0}{4}\frac{7}{5}\frac{5}{6}$ ....1
15 20	$47\frac{6}{2}\frac{9}{1}\frac{7}{7}\frac{6}{0}$ ....1
16 20	$168\frac{1}{6}\frac{1}{5}\frac{3}{8}$ ....1
17 20	$775\frac{2}{3}\frac{0}{5}\frac{0}{1}$ ....1
18 20	$4968\frac{1}{2}\frac{1}{7}$ ....1
19 20	$49931\frac{5}{2}\frac{1}{1}$ ....1

N.B. The foregoing calculations suppose even money on each battle.

A TABLE SHOWING THE ODDS FOR AND AGAINST ONE SIDE WINNING A CERTAIN NUMBER OF BATTLES, WHEN THERE IS EVEN MONEY ON EACH BATTLE.

Battles.	Odds.
4 One side wins	3 out of 4 is 11 to 5
5 Neither wins	4 out of 5 is 5 to 10
6 One side wins	4 out of 6 is 11 to 5
Neither wins	5 out of 6 is 25 to 7
7 Neither wins	5 out of 7 is 35 to 29
8 Neither wins	6 out of 8 is 91 to 37
9 One side wins	6 out of 9 is 65 to 63
Neither wins	7 out of 9 is 105 to 23
10 Neither wins	7 out of 10 is 21 to 11
11 One side wins	7 out of 11 is 281 to 231
Neither wins	8 out of 11 is 787 to 232
12 One side wins	7 out of 12 is 793 to 231
Neither wins	8 out of 12 is 602 to 337
13 One side wins	8 out of 13 is 595 to 429
Neither wins	9 out of 13 is 3003 to 1093

	Battles.	Odds.
14	One side wins 9 out of 14 is	4173 to 3719
15	One side wins 9 out of 15 is	9949 to 1335
	Neither wins 10 out of 15 is	11435 to 4954
16	One side wins 9 out of 16 is	26333 to 6435
	Neither wins 13 out of 16 is	17875 to 14893
17	One side wins 10 out of 17 is	20613 to 12158
	Neither wins 11 out of 17 is	136136 to 126008
20	One side wins 12 out of 20 is	131725 to 130165

The foregoing table is so plain, that it needs no explanation.

When there are five battles to fight, it is an equal wager that one side wins three battles running; and when six battles, then it is five to three that one side wins three battles running. It is $3\frac{1}{2}\frac{1}{5}$ to 1, you do not win two battles running, when each battle is six to five against you; and $2\frac{1}{3}\frac{3}{5}$ to 1 you do not, when each battle is six to five for you, near fifty shillings to a guinea. It is $4\frac{1}{16}$ to 1, you do not win two battles running, when each battle is five to four against you; and $2\frac{9}{25}$ to 1, when each battle is five to four for you. It is $5\frac{1}{4}$ to 1, you do not win two battles running, when each battle is six to four against you; and $1\frac{7}{9}$ to 1 you do not, when each battle is six to four for you. It is 8 to 1 you do not win two battles running, when each battle is two to one against you; and 5 to 4 you do not, when the odds in each battle are two to one for you.

Supposing each battle six to five for you, it is 94176 to 66875 (above seven to five) you win the odd battle out of five; but it is 120875 to 40176 (above three to one) you do not win four battles out of five; and almost 20 to 1 you do not win all five; but it is about 50 to 1 you do not

lose all five, and near $6\frac{4}{7}$ to 1 you do not lose four out of the five. And if each battle be five to four for you, it is 35625 to 23424 (above six to four) you win the odd battle out of the five, and $17\frac{2799}{3125}$ to 1 you do not win all the five, but it is $6\frac{7984}{7424}$ to 1 you do not lose four out of the five, and $56\frac{6814}{1024}$ to 1 you do not lose all five.

When there are only two battles to fight, it is $5\frac{1}{2}$ to 1 you do not win both, when the odds are 6 to 4 against you; and $1\frac{7}{9}$ to 1 you do not, when each battle is 6 to 4 for you. When the odds are 2 to 1 for you, it is 5 to 4 you do not win two battles running; and 8 to 1 you do not lose both. When there are four battles to fight, and the odds are 2 to 1 for you, then it is 65 to 16, or $4\frac{1}{16}$ to 1 you do not win all four; but it is 80 to 1 you do not lose all. And if the odds are 2 to 1 for you, then it will be 131 to 132 that you do not win four out of the five, and 211 to 32, or $6\frac{9}{32}$ to 1 you do not win all five: but it is 233 to 11 you do not lose four out of the five; and 242 to 1 you do not lose all five; and likewise it is 1248 to 939 you do not win five out of seven, and 1911 to 276 you do not win six out of seven, and 2059 to 128 or $16\frac{11}{128}$ to 1 you do not win all seven; but it is 2078 to 109 you do not lose five out of seven; and 2172 to 15, or $144\frac{4}{5}$ to 1 you do not lose six, and 2186 to 1, not all seven.

The odds of a match in which there are even battles, and one side is three, four, or any other number of battles a-head, it is double the odds you do not tie the match, more the odds you do not win it, less one to two.

For example—Suppose in a match of thirty battles one side was three a-head, and but seven battles to fight, then the other must win five out of the seven to tie, and six out of the seven to win

the match ; look in the table, and you will find it is $3\frac{2}{9}$ to 1, not 5, and 15 to 1, not 6 out of 7. The double of $3\frac{2}{9}$ is $6\frac{4}{9}$ more, 15 is $21\frac{4}{9}$ less, 1 is $20\frac{4}{9}$ to 2 in the odds of such a match. Suppose nine battles to fight, and one side is five battles a-head, then the other side must win seven out of 9 to save, and eight out of 9 to win, therefore the odds will be $69\frac{4}{5}$ to 1.

*The Odds on different successive Battles or Events,
supposing each to be equal.*

It is about an equal chance, that any particular side wins three successive battles in ten ; four in twenty-two, or five in forty-four.

About an equal bet that one side or the other gains three successive battles in five, twice three in twelve, thrice three in nineteen, four times in twenty-six, five times in thirty-five, and six times in forty.

Also, That four successive battles are won, once in eleven, twice in twenty-six, and thrice in forty-one, that five successive victories occur in twenty-two, and twice five in fifty-three engagements, and likewise that six successive events are gained once in forty-four.

ODDS IN THE MAIN OF

Odds in
each Battle.

Three Battles.
Five Battles.
Seven Battles.

2 to 1	is $2\frac{6}{7}$ to 1	is $3\frac{3}{6}\frac{9}{1}$ to 1	is $4\frac{3}{7}\frac{9}{3}$ to 1
3 2	.. $1\frac{3}{4}\frac{7}{4}$ .....	.. $2\frac{1}{3}\frac{4}{9}\frac{9}{2}$ .....	.. $2\frac{1}{2}\frac{9}{6}\frac{9}{4}\frac{5}{3}$
3 1	.. $5\frac{2}{3}$ .....	.. $8\frac{3}{5}\frac{5}{3}$ .....	.. $13\frac{5}{8}\frac{9}{7}$
5 4	.. $1\frac{1}{2}\frac{6}{4}$ .....	.. $1\frac{1}{3}\frac{1}{3}\frac{1}{2}\frac{9}{6}$ .....	.. $1\frac{1}{8}\frac{4}{17}\frac{8}{3}\frac{8}{4}$
5 3	.. $2\frac{1}{8}\frac{3}{1}$ .....	.. $2\frac{2}{4}\frac{8}{5}\frac{7}{6}$ .....	.. $3\frac{1}{12}\frac{4}{7}\frac{6}{4}\frac{6}{1}$
6 5	.. $1\frac{1}{5}\frac{8}{3}\frac{1}{2}$ .....	.. $1\frac{2}{6}\frac{9}{5}\frac{3}{8}\frac{9}{7}\frac{1}{2}$ .....	.. $1\frac{3}{7}\frac{8}{2}\frac{4}{3}\frac{3}{7}\frac{2}{5}$
7 5	.. $1\frac{2}{9}\frac{5}{3}\frac{3}{2}$ .....	.. $1\frac{1}{15}\frac{5}{8}\frac{3}{9}\frac{7}{6}\frac{4}{1}$ .....	.. $1\frac{1}{26}\frac{1}{12}\frac{6}{6}\frac{6}{7}\frac{9}{4}$
7 5	.. $1\frac{3}{4}\frac{1}{2}\frac{4}{3}$ .....	.. $1\frac{3}{4}\frac{8}{3}\frac{1}{2}\frac{6}{5}$ .....	.. $2\frac{2}{7}\frac{8}{9}\frac{5}{6}\frac{5}{7}\frac{7}{3}$
7 4	.. $2\frac{1}{4}\frac{3}{6}$ .....	.. $2\frac{3}{4}\frac{7}{3}\frac{1}{4}\frac{9}{4}$ .....	.. $3\frac{3}{4}\frac{1}{4}\frac{9}{4}\frac{6}{5}\frac{1}{4}$
8 6	.. $1\frac{7}{13}\frac{3}{5}$ .....	.. $1\frac{4}{6}\frac{1}{8}\frac{3}{1}$ .....	.. $1\frac{1}{2}\frac{6}{6}\frac{2}{6}\frac{6}{8}\frac{9}{7}$

GAME COCKS.

Suppose even Bets on both Sides, then one wins.

3 out of 4	is 5	to 3,	or $1\frac{1}{2}$	to 1
6 out of 9	is 65	to 63,	or $1\frac{2}{63}$	to 1
7 out of 11	is 231	to 181,	or $1\frac{5}{181}$	to 1
8 out of 13	is 2380	to 1716,	or $1\frac{664}{1716}$	to 1
9 out of 15	is 9949	to 6435,	or $1\frac{514}{6435}$	to 1
10 out of 17	is 20613	to 12155, {	or $1\frac{8459}{12155}$	to 1
not 11	is 21879	to 10889, {	or $2\frac{10889}{10889}$	to 1
11 out of 19	is 84883	to 46189, {	or $1\frac{869}{46189}$	to 1
not 12	is 20995	to 11773, {	or $1\frac{9223}{11773}$	to 1
12 out of 21	is 173965	to 88179, {	or $1\frac{85786}{88179}$	to 1
not 13	is 323323	to 200965, {	or $1\frac{62358}{200965}$	to 1
13 out of 23	is 2842226	to 1352078, {	or $2\frac{69935}{1352078}$	to 1
not 41	is 150009	to 106135, {	or $1\frac{49874}{106135}$	to 1

A TABLE,

SHOWING THE ODDS AGAINST EACH SIDE WINNING TWO BATTLES RUNNING.

GAME COCKS.

459

The Strong Side.			Odds in each.			The Weak Side.		
£.	s.	d.	£.	s.	d.	£.	s.	d.
0	8	3	...to...	0	4	0	8	.... to
0	7	9	$\frac{1}{3}$	0	4	0	7	....
0	7	14	$\frac{1}{3}$	0	4	0	6	....
0	6	6	$\frac{1}{4}$	0	4	0	8	....
0	6	24	$\frac{1}{3}$	0	4	0	5	....
0	5	10	$\frac{1}{6}$	0	4	0	7	....
0	5	8	$\frac{4}{3}$	0	4	0	9	....
0	5	0	0	0	0	0	5	....

THE USE OF THE FOREGOING TABLE.

Suppose a match between Kent and Middlesex, and the odds to be six to five Middlesex against Kent each battle ; it will be 9s. $5\frac{1}{4}$ d. and $\frac{1}{3}$ of a farthing to 4s. that Middlesex does not win the next two battles ; and it is 15s. $4\frac{1}{4}$ d. and $\frac{7}{25}$ of a farthing to 4s. that Kent does not win the next two battles.

If the bets be eight to seven each battle in favour of Middlesex, then it is 10s. and $\frac{3}{4}$ to 4s. that Middlesex does not win the two next battles ; and 14s. $4\frac{1}{4}$ d. and $\frac{3}{4}\frac{1}{9}$ to 4s. Kent does not win the next two battles.

When thirty battles are in a match it is 918624304 to 155117520 it will not be a drawn match—about 6 to 1.

And 4 $\frac{1}{8} \frac{2}{4} \frac{7}{4} \frac{9}{5} \frac{6}{6}$	..... to	1 when 20 battles.	
4 $\frac{1}{4} \frac{9}{8} \frac{4}{6} \frac{4}{2} \frac{4}{0}$	..... to	1 when 18	—
4 $\frac{1}{1} \frac{1}{2} \frac{8}{8} \frac{6}{7} \frac{6}{6}$	..... to	1 when 16	—
3 $\frac{2}{3} \frac{6}{4} \frac{3}{3} \frac{6}{2}$	..... to	1 when 14	—
3 $\frac{4}{9} \frac{0}{2} \frac{0}{4}$	..... to	1 when 12	—
3 $\frac{1}{2} \frac{6}{5} \frac{2}{2}$	..... to	1 when 10	—
2 $\frac{7}{2} \frac{0}{0}$	..... to	1 when 8	—
2 $\frac{1}{2}$	..... to	1 when 6	—
1 $\frac{2}{3}$	..... to	1 when 4	—

These calculations suppose even money on each battle.

RULES relating to the Method of MATCHING and FIGHTING of COCKS in London, in practice ever since the reign of King Charles II.

To begin the same by fighting the lightest pair of cocks (which fall in match) first proceeding upwards to the end ; that every lighter pair may fight earlier than those that are heavier.

In matching (with relation to the battles), it is a rule always in London :—That after the cocks of the main are weighed, the match-bills are compared.

That every pair of equal or dead weight, are separated, and fight against others ; provided that it appears that the main can be enlarged, by adding thereto, either one battle or more thereby.

HORSE-RACING.

LAWS OF RACING.

Horses take their ages from 1st January.

1760 yards are a mile.

240 yards are a distance.

Four inches are a hand.

Four pounds are a stone.

1. CATCH weights are, each party to appoint any person to ride without weighing.

2. A post match is to insert the age of the horses in the articles, and to run any horse of that age without declaring what horse, till you come to the post to start.

3. The horse that has his head at the ending post first, wins the heat.

4. Riders must ride their horses to the weighing post to weigh, and he that dismounts before, or wants weight, is distanced.

5. If a rider fall from his horse, and the horse be rode in by a person that is sufficient weight, he will take place the same as if it had not happened, provided he go back to the place where the rider fell.

6. All bets are for the best of the plate if nothing be said to the contrary.

7. For the best of the plate, where there are three heats run, the horse is second that wins one.

8. For the best of the heats, the horse is second that beats the other twice out of three times, though he do not win a heat.

9. A confirmed bet cannot be off without mutual consent.

10. Either of the betters may demand stakes to be made, and on refusal, declare the bet void.

11. If a party be absent on the day of the running, a public declaration of the bet may be made on the course, and a demand, whether any person will make stakes for the absent party; if no person consent to it, the bet may be declared void.

12. Bets agreed to pay or receive in town, or at any other particular place, cannot be declared off on the course.

13. At Newmarket, if a match be made for a particular day, in any meeting, and the parties agree to change the day, all bets must stand; but if run in a different meeting, the bets made before the alteration are void.

14. The person who lays the odds, has a right to choose his horse, or the field.

15. When a person has chosen his horse, the field is what starts against him, but there is no field unless one starts with him.

16. Bet made for guineas are paid in pounds.

17. If odds be laid without mentioning the horse before it is over, it must be determined as the bets were at the time of making it.

18. Bets made in running are not determined

till the plate is won, if that heat be not mentioned at the time of betting.

19. Where a plate is won by two heats, the preference of the horses is determined by the places they are in, in the second heat.

20. Horses running on the wrong side of the post, and not turning back, distanced.

21. A bet made after the heat is over, if the horse betted on does not start, is no bet.

22. When three horses have each won a heat, *they only* must start for a fourth, and the preference between them will be determined by it, there being before no difference between them.

23. No distance in a fourth heat.

24. Bets determined, though the horse does not start, when the words ‘absolutely,’ ‘run or pay,’ or ‘play or pay,’ are made use of in betting. All double bets considered as play or pay.

25. In running of heats, if it cannot be decided which is first, the heat goes for nothing, and they may all start again, except it be between horses that each won a heat.

26. Bets made on horses winning any number of plates, shall be understood as meaning the year of our Lord.

27. Money given to have a bet laid, not returned if not run.

28. Matches and bets are void on the decease of either party, before they are determined.

Handicap weights, are weights according to the supposed abilities of the horses.

Horses are not entitled to start without producing a proper certificate of their age, &c., if re-

quired, except where aged horses are included, in which case a horse may start without a certificate, provided he carry the same weight as an aged horse.

An untried stallion or mare is one whose produce has not started in public.

A maiden horse or mare is one that has never won.

In estimating winnings, it is the practice to consider the clear sum gained only, and, consequently, to exempt the winner's stake. A winner of a sweepstakes of 20 guineas each (three subscribers), is therefore not disqualified from running for a 50*l.* plate, expressed to be for horses that never won a plate, a match, or a sweepstakes of that value.

A horse walking over or receiving forfeit, shall not be deemed a winner.

If any horse shall be named or entered without being properly identified, he shall not be allowed to start in the race; but his owner shall be liable to pay the forfeit, or if a play or pay race, the whole stake. All bets on a horse so disqualified from starting; are void.

In every sweepstakes in which there shall be any allowance of weight to the produce of untried horses or mares, such allowances shall be claimed on the articles by each subscriber before the expiration of the time of naming; and if not so claimed, no allowance shall be made, even though the horse or mare should prove to have been untried at the time of naming.

When the riders of any horses brought out to run are called upon by the person appointed to start them to take their places for that purpose, the owner of every horse which comes to the post shall

be considered as liable to pay his whole stake and all bets respecting such horses shall be considered as pay or play bets.

If in running for any race, one horse shall jostle or cross another, such horse and every horse belonging to the same owner, or in which he shall have a share running in the same race, shall be disqualified for winning the race, whether such jostle or cross happened by the swerving of the horse or by the foul and careless riding of the jockey, or otherwise. And when one horse crosses the track of another behind him, it shall be deemed a sufficient cause of complaint, even though he be a clear length or more before the horse whose track he crosses.'

In naming or entering for any race where there shall be any particular conditions required as a qualification to start, it shall be sufficient if the horse were qualified at the expiration of the time allowed for naming or entering, and he shall not be disqualified by any thing which may happen after the expiration of that time, unless so specified in the article. And if any additional weight is to be carried by the horses which have won one or more plates or races within the year, it shall be construed to mean the year of our Lord. When the qualification of any horse is objected to, the owner must produce a certificate or other proper document before the race is run, to prove the qualification of the horse; and if he shall start his horse without so doing, the prize shall be withheld for a period fixed upon by the stewards, on the expiration of which, if the qualification be not proved to the satisfaction of the stewards, he shall not be entitled to the prize, though his horse shall have come in first, but it shall be given to the owner of the second horse. When the qualifica-

tion of a horse is objected to after the race is over, the person making the objection must prove the disqualification.

Where two horses run a dead heat, and the parties agree to divide the plate or stakes equally, all bets between those two horses, and between either of them and the field, must be settled by the money betted being put together, and divided between the parties in the same proportion as the stakes shall have been divided. If a bet be made on one of the horses that ran the dead heat against a horse that was beaten in the race, he who backed the horse that ran the dead heat wins half his bet. If the dead heat be the first event of a double bet, the bet shall be void.

No person can run in his own name, or in the name of any other person, two horses of which he is wholly, or in part the owner, for *any plate*. Doubts having arisen as to the true definition of the word "*plate*," the stewards of the Jockey Club have decided that where a sum of money is given to be run for, without any stake being made by the owners of the horses (entrance money not being considered as stake), *such prize shall be construed to be a plate*; but when a stake is deposited by the owners of the horses, which is to go to the winner, and an additional sum of money, piece of plate, or other reward is offered as a prize to the winner, even though such additions shall be denominated a plate by the donor, such race shall be deemed and taken to be a sweepstake, and not a plate.

All disputes arising elsewhere than at Newmarket, which may be referred to the stewards of the Jockey Club, must relate to horse-racing; the facts must be reduced into writing, and be sent by or with the sanction of the stewards of the races,

where the matter in question occurred ; and the parties must agree in writing to abide by the decision of the stewards of the Jockey Club.

LENGTHS OF THE DIFFERENT RACE-COURSES.

1760 yards are a mile.

220 yards are a furlong.

240 yards are a distance.

Newmarket Courses.

	M.	Fur.	Yds.
The Beacon Course is.....	4	1	138
The Round Course is.. ..	3	4	187
The last three miles of B. C. Course is..	3	0	45
The Ditch in, is.....	2	0	97
The last mile and distance of B. C. is..	1	1	156
The Ancaster Mile is	1	0	18
From the turn of the lands in.....	0	5	184
The Clermont Course (from the Ditch to the Duke's Stand) is.....	1	5	217
The Audley Course (from the Starting Post of the T. Y. C. to the end of the B. C.) about.....	1	6	0
Across the Flat is.....	1	2	24
The Rowley Mile is.....	1	0	1
The Ditch Mile is.....	0	7	28
The Abingdon Mile is.....	0	7	211
The Two Middle Miles of B. C. is.....	1	7	125
The Two Year Old Course (on the flat) is.....	0	5	136
The New ditto (part of the Bunbury mile) is.....	0	5	136
The Yearling Course.....	0	2	47
The Bunbury Mile.....	0	7	208

Ascot Heath—The two-mile course is a circular one, of which the last half is called the old mile. The new mile is straight and up hill all the way.

Buxton is a round course of one mile.

Chelmsford is a round course, short of two miles by about thirty yards ; about half of the straight mile is in the round course, finishing with rather a severe hill.

Chester is a circular course of one mile.

Doncaster is a round course of about 1 m. 7 fur. 70 yds.

The other courses are portions of this circle, viz. :—Red House, in 5 fur. 164 yds. ; T. Y. C., 7 fur. 189 yds. ; Fitzwilliam Course, 1 m. 4 fur. 10 yds. ; St. Leger Course, 1 m. 6 fur. 132 yds. ; Two Mile Course, 2 m. 0 fur. 15 yds. ; Four Mile Course (twice round), 3 m. 7 fur. 219 yds. ; Cup Course, 2 m. 5 fur. 14 yds.

Egham is a round, short of two miles by sixty-six yards, and nearly flat.

Epsom is a round course, the last mile and a half of which is the Derby and Oaks course ; from Mr. O'Kelly's stables in, is the Craven course of one mile and a quarter.

Knutsford is a round course of one mile.

Leeds is a circular course of 1 m. 2 fur. 48 yds. There is also a straight course through the centre of the circular one, of 2 fur. 158 yds., which, uniting with each half of the circle, forms two other courses in the form of a sector ; the one, 1 m. 11 yds. ; the other, 1 m. 135 yds.

Liverpool—The Maghull is an oval course of one mile flat. The Aintree course is 1 m. 4 fur. flat.

Manchester is an oval course of 7 fur. 184 yds. The cup course is 2 m. 168 yds. The T. Y. C. is 5 fur. 184 yds.

Newcastle is a square course, 1 m. 6 fur. 132

yds. The T. Y. C. 5 fur. 105 yds. Mile course from Newcastle turn, 6 fur. 184 yds. The two-mile course, 2 miles. The three-mile course, 2 m. 7 fur. 85 yds. Four-mile course, 3 m. 7. 153 yds.

Newton is a triangular course of 1 m. with a hill.

Nottingham is a round course of 1 m. 2 fur. 11 yds.

Oxford is a round course of 2 m. all but a distance, and quite flat, the last half mile straight.

Pontefract is an oval course of about 2 m. 1 fur.

Preston is an oval course of 1 m. flat.

Stockbridge is a round course rather hilly, the last three-quarters of a mile nearly straight. They have also a straight mile, and a round course of about one mile and a quarter; the latter is called the New Course.

York T. Y. C., 5 fur. 59 yds. Mile course, 1 m. 0 fur. 8yds. Last mile and quarter, 1 m. 2 fur. 15 yds. Last mile and a half, 1 m. 4 fur. 18 yds. Last mile and three-quarters, 1 m. 5 fur. 160 yds. Two-mile course, 1 m. 7 fur. 85 yds. Four-mile course, 3 m. 7 fur. 24 yds.

The following regulations respecting the weights and distances of His Majesty's plates have recently been published, and are to remain in force, till otherwise directed by His Majesty :—

The weights of the king's plate run for at *Newmarket* shall be fixed by the stewards of the Jockey Club.

Chester—Thrice round the course, rather more than three miles. Three years old to carry 7 st. 2lb. Four, 9st. 2lb. Five, 10st. Six and aged, 10st. 5lb.

Ascot Heath—To start at the New Mile Starting Post, to go once round and in. Weights the same

as at Chester. N.B. This does not apply to the hunter's plate, of which the conditions are to be fixed as formerly by the master of the buck-hounds.

Manchester—Three miles and a distance.

Newcastle-upon-Tyne—Three miles. Weights the same as at Chester.

Guildford, Edinburgh, Hampton, Liverpool, Ipswich, Chelmsford, and Winchester—Three years old, 7st. 5lb. Four, 9st. 1lb. Five, 9st. 11lb. Six and aged, 10st. 2lb. Two-mile heats.

Goodwood—Three years old, 7st. 4lb. Four, 9st. 2lb. Five, 9st. 13lb. Six and aged, 10st. 4lb. About three miles and four furlongs.

York—Three years old, 8st. Four, 8st. 12lb. Five, 9st. 4lb. Six, 9st. 7lb. And aged, 9st. 9lb. Two miles.

Canterbury, Salisbury, Lewes, Warwick, Weymouth, and Lichfield.—Three years old, 8st. 2lb. Four, 9st. 6lb. Five, 10st. Six and aged, 10st. 3lb. Two-mile heats.

Northampton, Bedford, Leicester, and Shrewsbury—Three years old, 7st. 11lb. Four, 9st. 1lb. Five, 9st. 9lb; and six and aged, 10st. Three miles.

Doncaster, Carlisle, and Caledonian Hunt.—Three years old, 7st. 9lb. Four, 9st. Five, 9st. 9lb. Six and aged, 10st. Four miles.

Lincoln and Nottingham—Three years old, 8st. 2lb. Four, 9st. 4lb. Five, 9st. 11lb. Six and aged, 10st. Two-mile heats.

York and Richmond—Alternate plate.—Four years old, 8st. 7lb. Five, 9st. 1lb. Six and aged, 9st. 5lb. Three miles.

The first Newmarket plate, the plates at Chelmsford and Lincoln, and that run for alternately at York and Richmond, are to be run for by mares only as heretofore.

FORM OF A CERTIFICATE OF HAVING WON A
KING'S PLATE.

These are to certify, that his majesty's plate of
hundred guineas was won at _____
_____ the _____ day of _____
18_____, by _____'s chesnut horse,
called _____
A. B. Steward.

C. D. Clerk of the Course.

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E. { (a) Lord Lieutenant to
the County.

To the Master of the Horse to his Majesty.

[The signature of the Lord Lieutenant alone is sufficient, but that can seldom be obtained without first producing to him a certificate, signed by the Steward and Clerk of the Course.]

N.B. The certificate, when properly signed, is payable at sight to the winner of the plate (or to any other person, if endorsed by the winner), at the office of the Clerk of his Majesty's Stables, in the King's Mews, London.

The Clerk of the Stables requires the person presenting Certificate for payment to provide a Receipt Stamp.

AN ARTICLE FOR A HORSE-MATCH.

Newmarket, April —, 18—.

A. B's Chesnut Colt, now rising four years old,
got by _____ out of a Partner

(a) If the Lord Lieutenant be out of the kingdom, the signature of the person regularly deputed by him is admitted. The certificate for the Ascot-Heath plate must be signed by the Master of his Majesty's Hounds, instead of the Lord Lieutenant.

Mare, is to run over the Beacon Course at Newmarket, on _____ Tuesday in October, 18 —, for Forty Guineas, play or pay, and Two Hundred Guineas by, half forfeit, against C. D.'s Grey Colt of the same age, got by _____
_____ out of a Crab Mare, carrying ten stone each, to start at the usual hour, each party to maintain his own, with a power reserved to alter the day and hour, or either, by consent.

A. B.—C. D.

Richmond, Yorkshire.

I do hereby certify, that my Grey Colt _____ now at _____ was bred by me, and that he was no more than four years old last grass. As witness my hand this _____ day of _____ 18 _____

J. C.

TABLES OF ODDS ON DIFFERENT CHANGES OF EVENTS.

TABLE I.

ODDS ON TWO EVENTS; *from 6 to 1 for you, to 6 to 1 against you.*

Two Events, both in your favour.	1st. That you do win both.	2nd. That you do not lose both.	3d.	4th.
			That you do not win the 1st, and lose the 2d.	That you do not lose the 1st, and win the 2d.
6 to 1 ..	6 to 1 ..	36 to 13	48 to 1	43 to 6
6..1 ..	5..1 ..	30 .. 12	41 .. 1	6 .. 1
6..1 ..	4..1 ..	24 .. 11	34 .. 1	29 .. 6
6..1 ..	7..2 ..	2 .. 1	61 .. 2	51 .. 12
6..1 ..	3..1 ..	9 .. 5	27 .. 1	11 .. 3
6..1 ..	5..2 ..	30 .. 19	47 .. 2	37 .. 12
6..1 ..	2..1 ..	4 .. 3	20 .. 1	15 .. 6
6..1 ..	7..4 ..	6 .. 5	73 .. 4	53 .. 24
6..1 ..	3..2 ..	18 .. 17	33 .. 2	23 .. 12
6..1 ..	5..4 ..	10 .. 11	59 .. 4	39 .. 24
6..1 ..	even ..	3 .. 4	13 .. 1	4 .. 3
5..1 ..	5 to 1 ..	25 .. 11	35 .. 1	31 .. 5
5..1 ..	4..1 ..	2 .. 1	29 .. 1	5 .. 1
5..1 ..	7..2 ..	35 .. 19	26 .. 1	44 .. 10
5..1 ..	3..1 ..	15 .. 9	23 .. 1	19 .. 5
5..1 ..	5..2 ..	25 .. 17	20 .. 1	32 .. 10
5..1 ..	2..1 ..	5 .. 4	17 .. 1	13 .. 5
5..1 ..	7..4 ..	35 .. 1	62 .. 4	46 .. 20
5..1 ..	3..2 ..	even ..	14 .. 1	2 .. 1
5..1 ..	5..4 ..	25 to 29	50 .. 4	17 .. 10
5..1 ..	even ..	5 .. 7	11 .. 1	7 .. 5
4..1 ..	4 to 1 ..	16 .. 9	24 .. 1	21 .. 4
4..1 ..	7..2 ..	28 .. 17	43 .. 2	37 .. 8
4..1 ..	3..1 ..	3 .. 2	19 .. 1	4 .. 1
4..1 ..	5..2 ..	4 .. 3	33 .. 2	27 .. 8
4..1 ..	2..1 ..	8 .. 7	14 .. 1	11 .. 4
4..1 ..	7..4 ..	28 .. 27	51 .. 4	39 .. 16
4..1 ..	3..2 ..	12 .. 13	23 .. 2	17 .. 8
4..1 ..	5..4 ..	4 .. 5	41 .. 4	29 .. 16
4..1 ..	even ..	2 .. 3	9 .. 1	3 .. 2
3..1 ..	3 to 1 ..	9 .. 7	15 .. 1	13 .. 3
3..1 ..	5..2 ..	15 .. 13	13 .. 1	22 .. 6
3..1 ..	2..1 ..	even ..	11 .. 1	3 .. 1
3..1 ..	7..4 ..	21 to 23	10 .. 1	16 .. 6

Two Events, both in your favour.	1st. That you do win both.	2d. That you do not lose both.	3d. That you do not win the 1st, and lose the 2d.	4th. That you do not lose the 1st, and win the 2d.
3 to 1 .. 3 to 2 ..	9 to 11	9 to 1	7 to 3	17 to 3
3 .. 1 .. 5 .. 4 ..	15 .. 21	8 .. 1	2 .. 1	31 .. 5
3 .. 1 .. even ..	3 .. 5	7 .. 1	5 .. 3	7 .. 1
5 .. 2 .. 5 to 2 ..	25 .. 24	45 .. 4	39 .. 10	39 .. 10
5 .. 2 .. 2 .. 1 ..	10 .. 11	19 .. 2	16 .. 5	17 .. 4
5 .. 2 .. 7 .. 4 ..	5 .. 6	69 .. 8	57 .. 20	63 .. 14
5 .. 2 .. 3 .. 2 ..	3 .. 4	31 .. 4	5 .. 2	29 .. 6
5 .. 2 .. 5 .. 4 ..	25 .. 38	55 .. 8	43 .. 20	53 .. 10
5 .. 2 .. even ..	5 .. 9	6 .. 1	9 .. 5	6 .. 1
2 .. 1 .. 2 to 1 ..	4 .. 5	8 .. 1	7 .. 2	7 .. 2
2 .. 1 .. 7 .. 4 ..	14 .. 19	29 .. 4	25 .. 8	28 .. 7
2 .. 1 .. 3 .. 2 ..	2 .. 3	13 .. 2	11 .. 4	4 .. 1
2 .. 1 .. AND ..	10 .. 17	23 .. 4	19 .. 8	22 .. 5
2 .. 1 .. even ..	1 .. 2	5 .. 1	2 .. 1	5 .. 1
7 .. 4 .. 7 to 4 ..	49 .. 72	105 .. 16	93 .. 28	93 .. 28
7 .. 4 .. 3 .. 2 ..	21 .. 34	47 .. 8	41 .. 14	43 .. 12
7 .. 4 .. 5 .. 4 ..	35 .. 64	83 .. 16	71 .. 28	79 .. 20
7 .. 4 .. even ..	7 .. 15	9 .. 2	15 .. 7	9 .. 2
3 .. 2 .. 3 to 2 ..	9 .. 16	21 .. 4	19 .. 6	19 .. 6
3 .. 2 .. 5 .. 4 ..	1 .. 2	37 .. 8	33 .. 12	7 .. 2
3 .. 2 .. even ..	3 .. 7	4 .. 1	7 .. 3	4 .. 1
5 .. 4 .. 5 to 4 ..	25 .. 56	65 .. 16	61 .. 20	61 .. 20
5 .. 4 .. even ..	5 .. 13	7 .. 2	13 .. 5	7 .. 2
even .. even ..	1 .. 3	3 .. 1	3 .. 1	3 .. 1

Explanation to the foregoing Tables on two events, containing 232 changes, from 6 to 1 for, to 6 to 1 against you, according to the current odds on each event.

In the first line you begin with 6 to 1, both *for* you in the first column ; in the second it is 6 to 1 *against* you on each ; in the third, it is 6 to 1 *for* you, and 6 to 1 *against* you ; and, in the 4th, the same reversed.

Suppose two events of 6 to 1, and 3 to 1, both *for* you ; look for 6 to 1, and 3 to 1, and you will find it in the first column, 9 to 5 that you win both : in the second it is 27 to 1 against your losing both, equally the same as 6 to 1 and 3 to 1 both *against* you, and that you did not win both ; in the third column, it is 11 to 3 that you do not win the first and lose the second, equally the same as if it had been 6 to 1 *for*, and 3 to 1 *against* you, and that you did not win both ; and in the fourth column it is 25 to 3 that you do not lose the first and win the second, the same as if it was 6 to 1 against you on the first, and 3 to 1 *for* you on the second.

TABLE II.

ODDS ON THREE EVENTS.

The following Tables, on Three Events, from 6 to 1 for you to 6 to 1 against you, which admit of one thousand seven hundred and sixty different changes or forms in their coming off, are regularly ranged with the accurate odds to every change or form of each, and measured as low as either the integers or fractions would admit, the first column, where the odds are against you winning them all, excepted.

Three Events, all in your favour.			1st. Against your winning them all.	2d. Against your losing them all.	3d, Against your winning the 1st, and losing the 2d and 3d.
6 to 1	6 to 1	6 to 1	127 to 216	342 to 1	56½ to 1
6..1	6..1	5..1	19 .. 30	293 .. 1	48 .. 1
6..1	6..1	4..1	101 .. 144	244 .. 1	39½ .. 1
6..1	6..1	3..1	22 .. 27	195 .. 1	31½ .. 1
6..1	6..1	5..2	163 .. 180	341 .. 2	27½ .. 1
6..1	6..1	2..1	75 .. 72	146 .. 1	23 .. 1
6..1	6..1	7..4	287 .. 252	133½ .. 1	21½ .. 1
6..1	6..1	3..2	127 .. 108	121½ .. 1	19½ .. 1
6..1	6..1	5..4	87 .. 60	109½ .. 1	17½ .. 1
6..1	6..1	even	31 .. 18	97 .. 1	15½ .. 1
6..1	5..1	5 to 1	17 .. 25	251 .. 1	41 .. 1
6..1	5..1	4..1	3 .. 4	209 .. 1	34 .. 1
6..1	5..1	3..1	13 .. 15	167 .. 1	27 .. 1
6..1	5..1	5..2	24 .. 25	146 .. 1	23½ .. 1
6..1	5..1	2..1	11 .. 10	125 .. 1	20 .. 1
6..1	5..1	7..4	6 .. 5	114½ .. 1	18½ .. 1
6..1	5..1	3..2	4 .. 3	104 .. 1	16½ .. 1
6..1	5..1	5..4	38 .. ARE	93½ .. 1	14½ .. 1
6..1	5..1	even	9 ..	83 .. 1	13 .. 1
6..1	4..1	4 to 1	79 ..	96 174 .. 1	28½ .. 1
6..1	4..1	3..1	17 ..	18 139 .. 1	22½ .. 1
6..1	4..1	5..2	25 ..	24 121½ .. 1	19½ .. 1
6..1	4..1	2..1	19 ..	16 104 .. 1	16½ .. 1
6..1	4..1	7..4	31 ..	24 95½ .. 1	15½ .. 1
6..1	4..1	3..2	103 ..	72 86½ .. 1	13½ .. 1
6..1	4..1	5..4	13 ..	8 77½ .. 1	12½ .. 1
6..1	4..1	even	23 ..	12 69 .. 1	10½ .. 1
6..1	3..1	3 to 1	29 ..	27 111 .. 1	17½ .. 1
6..1	3..1	5..2	53 ..	45 97 .. 1	15½ .. 1
6..1	3..1	2..1	4 ..	3 83 .. 1	13 .. 1
6..1	3..1	7..4	13 ..	9 76 .. 1	11½ .. 1
6..1	3..1	3..2	43 ..	27 69 .. 1	10½ .. 1
6..1	3..1	5..4	9 ..	5 62 .. 1	9½ .. 1
6..1	3..1	even	19 ..	9 55 .. 1	8 .. 1

4th. Against your winning the 1st & 2d, and losing the 3d.	5th. Against your losing the 1st, and winning the 2nd & 3rd.	6th. Against your losing the 1st & 2d, and winning the 3d.	7th. Against your winning the 1st & 3d, and losing the 2d.	8th. Against your losing the 1st & 3d, and winning the 2d.
8 $\frac{2}{3}$	to 1	8 $\frac{1}{6}$ to 1	56 $\frac{1}{6}$ to 1	56 $\frac{1}{6}$ to 1
7 $\frac{1}{6}$	.. 1	8 $\frac{4}{5}$.. 1	57 $\frac{4}{5}$.. 1	48 .. 1
5 $\frac{9}{6}$	.. 1	9 $\frac{5}{24}$.. 1	60 $\frac{1}{4}$.. 1	39 $\frac{5}{6}$.. 1
4 $\frac{4}{9}$	.. 1	9 $\frac{8}{9}$.. 1	64 $\frac{1}{3}$.. 1	31 $\frac{2}{3}$.. 1
3 $\frac{5}{72}$	.. 1	10 $\frac{1}{30}$.. 1	67 $\frac{3}{6}$.. 1	27 $\frac{7}{12}$.. 1
3 $\frac{1}{12}$	.. 1	11 $\frac{1}{4}$.. 1	72 $\frac{1}{2}$.. 1	23 $\frac{1}{2}$.. 1
2 $\frac{9}{144}$	.. 1	11 $\frac{6}{6}$.. 1	76 .. 1	21 $\frac{1}{24}$.. 1
2 $\frac{2}{72}$	.. 1	12 $\frac{1}{18}$.. 1	80 $\frac{2}{3}$.. 1	19 $\frac{5}{12}$.. 1
2 $\frac{1}{16}$	.. 1	13 $\frac{1}{30}$.. 1	87 $\frac{1}{5}$.. 1	17 $\frac{9}{24}$.. 1
31	.. 18	15 $\frac{1}{3}$.. 1	97 .. 1	15 $\frac{1}{3}$.. 1
7 $\frac{2}{5}$	.. 1	9 $\frac{2}{25}$.. 1	49 $\frac{2}{5}$.. 1	49 $\frac{2}{5}$.. 1
6	.. 1	9 $\frac{1}{2}$.. 1	51 $\frac{1}{2}$.. 1	41 .. 1
4 $\frac{3}{5}$	.. 1	10 $\frac{1}{5}$.. 1	55 .. 1	32 $\frac{3}{5}$.. 1
3 $\frac{9}{10}$	.. 1	10 $\frac{1}{25}$.. 1	57 $\frac{5}{45}$.. 1	28 $\frac{2}{5}$.. 1
3 $\frac{1}{5}$	.. 1	11 $\frac{8}{5}$.. 1	62 .. 1	24 $\frac{1}{5}$.. 1
2 $\frac{7}{20}$	.. 1	12 $\frac{1}{5}$.. 1	65 .. 1	22 $\frac{1}{16}$.. 1
5	.. 2	13 .. 1	69 .. 1	20 .. 1
2 $\frac{3}{20}$	.. 1	14 $\frac{3}{25}$.. 1	74 $\frac{2}{5}$.. 1	17 $\frac{9}{10}$.. 1
9	.. 5	15 $\frac{1}{5}$.. 1	83 .. 1	15 $\frac{4}{5}$.. 1
6 $\frac{7}{24}$	.. 1	9 $\frac{15}{16}$.. 1	42 $\frac{3}{4}$.. 1	43 $\frac{3}{4}$.. 1
4 $\frac{5}{6}$	.. 1	10 $\frac{2}{3}$.. 1	45 $\frac{2}{3}$.. 1	34 .. 1
4 $\frac{5}{18}$	.. 1	11 $\frac{1}{4}$.. 1	48 .. 1	29 $\frac{5}{8}$.. 1
3 $\frac{9}{24}$	.. 1	12 $\frac{1}{9}$.. 1	51 $\frac{1}{2}$.. 1	25 $\frac{1}{4}$.. 1
3 $\frac{1}{6}$	.. 1	12 $\frac{9}{4}$.. 1	54 .. 1	23 $\frac{1}{6}$.. 1
2 $\frac{9}{48}$	.. 1	13 $\frac{7}{12}$.. 1	57 $\frac{1}{3}$.. 1	20 $\frac{7}{8}$.. 1
2 $\frac{9}{32}$	.. 1	14 $\frac{3}{4}$.. 1	62 .. 1	18 $\frac{11}{16}$.. 1
23	.. 12	16 $\frac{1}{4}$.. 1	69 .. 1	16 $\frac{1}{2}$.. 1
5 $\frac{2}{9}$	.. 1	11 $\frac{4}{9}$.. 1	36 $\frac{1}{3}$.. 1	36 $\frac{1}{3}$.. 1
4 $\frac{4}{9}$	.. 1	12 $\frac{1}{15}$.. 1	38 $\frac{1}{5}$.. 1	31 $\frac{2}{3}$.. 1
3 $\frac{2}{3}$	.. 1	13 .. 1	41 .. 1	27 .. 1
2 $\frac{5}{18}$	.. 1	13 $\frac{2}{3}$.. 1	43 .. 1	24 $\frac{2}{3}$.. 1
2 $\frac{8}{9}$	.. 1	14 $\frac{5}{9}$.. 1	45 $\frac{2}{3}$.. 1	22 $\frac{1}{3}$.. 1
5	.. 2	15 $\frac{4}{5}$.. 1	49 $\frac{2}{3}$.. 1	20 .. 1
2 $\frac{1}{3}$	.. 1	17 $\frac{2}{3}$.. 1	55 .. 1	17 $\frac{2}{3}$.. 1

Three Events, all in your favour,				1st. Against your winning them all.	2nd. Against your losing them all.	3rd. Against your winning the 1st, and losing the 2d & 3d.
6 to 1	5 to 2	..	5 to 2	..	193 to 150	84 $\frac{3}{4}$ to 1
6..1	5..2	..	2..1	..	29 .. 20	27 $\frac{1}{2}$.. 1
6..1	5..2	..	7..4	..	329 .. 210	66 $\frac{1}{8}$.. 1
6..1	5..2	..	3..2	..	31 .. 18	60 .. 1
6..1	5..2	..	5..4	..	291 .. 150	54 $\frac{1}{8}$.. 1
6..1	5..2	..	even	..	31 .. 15	48 .. 1
6..1	2..1	..	2 to 1	..	39 .. 24	62 .. 1
6..1	2..1	..	7..4	..	7 .. 4	56 $\frac{3}{4}$.. 1
6..1	2..1	..	3..2	..	23 .. 12	51 $\frac{1}{2}$.. 1
6..1	2..1	..	5..4	..	129 .. 60	46 $\frac{1}{4}$.. 1
6..1	2..1	..	even	..	5 .. 2	41 .. 1
6..1	7..4	..	7 to 4	..	79 .. 42	51 $\frac{1}{6}$.. 1
6..1	7..4	..	3..2	..	2 $\frac{1}{8}$.. 1	47 $\frac{1}{8}$.. 1
6..1	7..4	..	5..4	..	23 .. 10	42 $\frac{5}{16}$.. 1
6..1	7..4	..	even	..	8 .. 3	37 $\frac{1}{2}$.. 1
6..1	3..2	..	3 to 2	..	2 $\frac{1}{4}$.. 1	42 $\frac{3}{4}$.. 1
6..1	3..2	..	5..4	..	5 .. 2	38 $\frac{5}{8}$.. 1
6..1	3..2	..	even	..	26 .. 9	34 .. 1
6..1	5..4	AND	5 to 4	..	139 .. 50	34 $\frac{7}{16}$.. 1
6..1	5..4	..	even	..	16 .. 5	30 $\frac{1}{2}$.. 1
6..1	even	..	even	..	22 .. 6	27 .. 1
5..1	5 to 1	..	5 to 1	..	91 .. 125	215 .. 1
5..1	5..1	..	4..1	..	4 .. 5	179 .. 1
5..1	5..1	..	3..1	..	23 .. 25	143 .. 1
5..1	5..1	..	5..2	..	127 .. 125	125 .. 1
5..1	5..1	..	2..1	..	29 .. 25	107 .. 1
5..1	5..1	..	7..4	..	221 .. 175	98 .. 1
5..1	5..1	..	3..2	..	7 .. 5	89 .. 1
5..1	5..1	..	5..4	..	199 .. 125	80 .. 1
5..1	5..1	..	even	..	47 .. 25	71 .. 1
5..1	4..1	..	4 to 1	..	7 .. 8	149 .. 1
5..1	4..1	..	3..1	..	even	119 .. 1
5..1	4..1	..	5..2	..	11 .. 10	104 .. 1
5..1	4..1	..	2..1	..	5 .. 4	89 .. 1

4th Against your winning the 1st & 2d, and losing the 3d.	5th. Against your losing the 1st, and winning the 2d & 3d.	6th. Against your losing the 1st & 2d, and winning the 3d.	7th. Against your winning the 1st & 3d, and losing the 2d.	8th. Against your losing the 1st & 3d, and winning the 2d.
4 ⁴³ ₆₆ to 1	12 ¹⁸ ₂ to 1	33 ³ ₁₀ to 1	4 ⁴³ ₆₀ to 1	33 ³ ₁₀ to 1
3 ² ₁₀ .. 1	13 ⁷ ₁₀ .. 1	35 ³ ₄ .. 1	5 ⁸ ₈ .. 1	28 ² ₅ .. 1
3 ⁵⁹ ₁₂₀ .. 1	14 ² ₅ .. 1	37 ¹ ₂ .. 1	5 ⁵ ₁₂ .. 1	25 ¹⁹ ₂₀ .. 1
3 ¹ ₁₂ .. 1	15 ⁵ ₃ .. 1	39 ⁵ ₆ .. 1	5 ²⁹ ₃₆ .. 1	23 ¹ ₂ .. 1
2 ²⁷ ₄₀ .. 1	16 ¹⁶ ₂₅ .. 1	43 ¹ ₁₆ .. 1	6 ⁷ ₂₀ .. 1	21 ¹ ₂ .. 1
34 .. 15	18 ³ ₅ .. 1	48 .. 1	7 ¹ ₆ .. 1	18 ¹ ₅ .. 1
4 ¹ ₄ .. 1	14 ³ ₄ .. 1	30 ¹ ₂ .. 1	4 ¹ ₄ .. 1	30 ¹ ₂ .. 1
3 ³⁹ ₄₈ .. 1	15 ¹ ₂ .. 1	32 .. 1	4 ¹ ₂ .. 1	27 ⁷ ₈ .. 1
3 ¹ ₈ .. 1	16 ¹ ₂ .. 1	34 .. 1	4 ⁵ ₆ .. 1	25 ¹ ₄ .. 1
2 ¹⁵ ₁₆ .. 1	17 ⁹ ₁₀ .. 1	36 ⁴ ₅ .. 1	5 ⁹ ₃₀ .. 1	22 ⁵ ₈ .. 1
5 .. 2	20 .. 1	41 .. 1	6 .. 1	20 .. 1
4 ¹ ₂₄ .. 1	16 ² ₇ .. 1	29 ¹ ₄ .. 1	4 ¹ ₂₄ .. 1	29 ¹ ₄ .. 1
3 ⁷ ₁₂ .. 1	17 ¹ ₃ .. 1	31 ¹ ₁₂ .. 1	4 ²⁵ ₇₂ .. 1	26 ¹ ₂ .. 1
3 ¹ ₈ .. 1	18 ⁴ ₅ .. 1	33 ¹¹ ₂₀ .. 1	4 ²³ ₁₂₀ .. 1	23 ³ ₄ .. 1
2 ¹ ₃ .. 1	21 .. 1	37 ¹ ₂ .. 1	5 ⁵ ₁₂ .. 1	21 .. 1
3 ¹¹ ₃₆ .. 1	18 ⁴ ₉ .. 1	28 ¹ ₆ .. 1	3 ³¹ ₃₆ .. 1	28 ¹ ₆ .. 1
3 ⁸ ₈ .. 1	20 .. 1	30 ¹ ₂ .. 1	4 ¹ ₄ .. 1	25 ¹ ₄ .. 1
29 .. 9	22 ¹ ₃ .. 1	34 .. 1	4 ⁵ ₆ .. 1	22 ¹ ₃ .. 1
3 ²⁹ ₄₀ .. 1	21 ¹⁷ ₂₅ .. 1	27 ⁷ ₂₀ .. 1	3 ²⁹ ₄₀ .. 1	27 ⁷ ₁₀ .. 1
3 ¹ ₅ .. 1	24 ¹ ₃ .. 1	30 ¹ ₂ .. 1	4 ¹ ₄ .. 1	24 ¹ ₅ .. 1
3 ² ₃ .. 1	27 .. 1	27 .. 1	3 ² ₃ .. 1	27 .. 1
7 ¹⁶ ₂₅ .. 1	7 ¹⁶ ₂₅ .. 1	42 ¹ ₅ .. 1	7 ¹⁶ ₂₅ .. 1	42 ¹ ₅ .. 1
6 ¹ ₅ .. 1	8 .. 1	44 .. 1	8 .. 1	35 .. 1
4 ¹⁹ ₂ .. 1	8 ¹ ₅ .. 1	47 .. 1	8 ³ ₅ .. 1	27 ⁴ ₅ .. 1
4 ¹ ₂₅ .. 1	9 ² ₂₅ .. 1	49 ² ₅ .. 1	9 ² ₂₅ .. 1	24 ¹ ₅ .. 1
3 ⁸ ₂₅ .. 1	9 ⁴ ₅ .. 1	53 .. 1	9 ⁴ ₅ .. 1	20 ³ ₅ .. 1
2 ²⁴ ₂₅ .. 1	10 ¹¹ ₄₅ .. 1	55 ⁴ ₇ .. 1	10 ¹¹ ₃₅ .. 1	18 ⁴ ₅ .. 1
2 ³ ₅ .. 1	11 .. 1	59 .. 1	11 .. 1	17 .. 1
2 ⁶ ₂₅ .. 1	11 ²⁴ ₂₅ .. 1	63 ⁴ ₅ .. 1	11 ²⁴ ₂₅ .. 1	15 ¹ ₅ .. 1
47 .. 25	13 ³ ₅ .. 1	71 .. 1	13 ² ₅ .. 1	13 ² ₅ .. 1
6 ¹ ₉ .. 1	8 ² ₈ .. 1	36 ¹ ₂ .. 1	6 ¹ ₂ .. 1	36 ¹ ₂ .. 1
5 .. 1	9 .. 1	29 .. 1	7 .. 1	29 .. 1
4 .. 1	9 ¹ ₂ .. 1	41 .. 1	7 ² ₅ .. 1	25 ¹ ₄ .. 1
3 .. 1	10 ¹ ₄ .. 1	44 .. 1	8 ³ ₇ .. 1	21 ¹ ₂ .. 1

Three Events, all in your favour.					1st. Against your winning them all.	2d. Against your losing them all.	3d. Against your winning the 1st, and losing the 2d & 3d.
5 to 1	4 to 1	..	7 to 4	..	19 to 14	81½ to 1	15½ .. 1
5..1	4..1	..	3..2	..	3 .. 2	74 .. 1	14 .. 1
5..1	4..1	..	2..4	..	17 .. 10	66½ .. 1	12½ .. 1
5..1	4..1	..	even	..	2 .. 1	59 .. 1	11 .. 1
5..1	3..1	..	3 to 1	..	51 .. 45	95 .. 1	18½ .. 1
5..1	3..1	..	5..2	..	31 .. 25	83 .. 1	15½ .. 1
2..1	3..1	..	2..1	..	7 .. 5	71 .. 1	13½ .. 1
5..1	3..1	..	7..4	..	159 .. 105	65 .. 1	12½ .. 1
5..1	3..1	..	3..2	..	5 .. 3	59 .. 1	11 .. 1
5..1	3..1	..	5..4	..	47 .. 25	53 .. 1	9½ .. 1
5..1	3..1	..	even	..	11 .. 5	47 .. 1	8½ .. 1
5..1	5..2	..	5 to 2	..	169 .. 125	72½ .. 1	13½ .. 1
5..1	5..2	..	2..1	..	38 .. 25	62 .. 1	11½ .. 1
5..1	5..2	..	7..4	..	41 .. 25	56¾ .. 1	10½ .. 1
5..1	5..2	..	3..2	..	9 .. 5	51½ .. 1	9½ .. 1
5..1	5..2	..	5..4	..	253 .. 125	46½ .. 1	8½ .. 1
5..1	5..2	..	even	..	59 .. 25	41 .. 1	7½ .. 1
5..1	2..1	..	2 to 1	ARE	17 .. 10	53 .. 1	9½ .. 1
5..1	2..1	..	7..4	..	64 .. 35	48½ .. 1	8½ .. 1
5..1	2..1	..	3..2	..	2 .. 1	44 .. 1	8 .. 1
5..1	2..1	..	5..4	..	56 .. 25	39½ .. 1	7½ .. 1
5..1	2..1	..	even	..	13 .. 5	35 .. 1	6½ .. 1
5..1	7..4	..	7 to 4	..	481 .. 245	44¾ .. 1	8½ .. 1
5..1	7..4	..	3..2	..	225 .. 105	40½ .. 1	7½ .. 1
5..1	7..4	..	5..4	..	419 .. 175	36½ .. 1	6½ .. 1
5..1	7..4	..	even	..	97 .. 25	32 .. 1	5½ .. 1
5..1	3..2	..	3 to 2	..	7 .. 3	36½ .. 1	6½ .. 1
5..1	3..2	..	5..4	..	13 .. 5	32¾ .. 1	5¾ .. 1
5..1	3..2	..	even	..	3 .. 1	29 .. 1	5 .. 1
5..1	5..4	..	5 to 4	..	361 .. 125	29¾ .. 1	5¾ .. 1
5..1	5..4	..	even	..	83 .. 25	26 .. 1	4½ .. 1
5..1	even	..	even	..	19 .. 5	23 .. 1	3½ .. 1
4..1	4 to 1	..	4 to 1	..	61 .. 64	124 .. 1	30½ .. 1
4..1	4..1	..	3..1	..	13 .. 12	99 .. 1	24 .. 1

4th. Against your winning the 1st & 2d, and losing the 3rd.	5th. Against your losing the 1st, and winning the 2d & 3d.	6th. Against your losing the 1st & 2d, and winning the 3d.	7th. Against your winning the 1st & 3d, and losing the 2d.	8th. Against your losing the 1st & 3d, and winning the 2d.
3 $\frac{1}{8}$	to 1	10 $\frac{11}{14}$ to 1	16 $\frac{1}{7}$ to 1	9 to 1
2 $\frac{3}{4}$	.. 1	11 $\frac{1}{2}$.. 1	49 .. 1	9 .. 1
2 $\frac{3}{8}$	.. 1	12 $\frac{1}{2}$.. 1	53 .. 1	9 $\frac{4}{5}$.. 1
2	.. 1	14 .. 1	59 .. 1	11 .. 1
5 $\frac{2}{5}$	.. 1	9 $\frac{2}{3}$.. 1	31 .. 1	5 $\frac{2}{5}$.. 1
4 $\frac{3}{5}$	.. 1	10 $\frac{1}{3}$.. 1	32 $\frac{3}{5}$.. 1	5 $\frac{18}{25}$.. 1
3 $\frac{4}{5}$	.. 1	11 .. 1	35 .. 1	6 $\frac{1}{5}$.. 1
3 $\frac{2}{5}$	.. 1	11 $\frac{4}{7}$.. 1	36 $\frac{5}{7}$.. 1	6 $\frac{19}{35}$.. 1
3	.. 1	12 $\frac{1}{8}$.. 1	39 .. 1	7 .. 1
2 $\frac{3}{5}$	.. 1	13 $\frac{2}{5}$.. 1	42 $\frac{1}{5}$.. 1	7 $\frac{16}{25}$.. 1
2 $\frac{1}{5}$	.. 1	15 .. 1	47 .. 1	8 $\frac{1}{5}$.. 1
4 $\frac{22}{25}$	.. 1	10 $\frac{19}{25}$.. 1	28 $\frac{2}{5}$.. 1	4 $\frac{22}{25}$.. 1
4 $\frac{1}{25}$	.. 1	11 $\frac{3}{5}$.. 1	30 $\frac{1}{2}$.. 1	5 $\frac{3}{10}$.. 1
3 $\frac{1}{50}$	.. 1	12 $\frac{1}{5}$.. 1	32 .. 1	5 $\frac{1}{5}$.. 1
3 $\frac{1}{5}$	.. 1	13 .. 1	34 .. 1	6 .. 1
2 $\frac{9}{50}$	.. 1	14 $\frac{3}{25}$.. 1	36 $\frac{4}{5}$.. 1	6 $\frac{14}{25}$.. 1
2 $\frac{9}{25}$	.. 1	15 $\frac{4}{5}$.. 1	11 .. 1	7 $\frac{2}{5}$.. 1
4 $\frac{2}{5}$	.. 1	12 $\frac{1}{2}$.. 1	26 .. 1	4 $\frac{2}{5}$.. 1
3 $\frac{19}{20}$	.. 1	13 $\frac{1}{7}$.. 1	29 $\frac{2}{7}$.. 1	4 $\frac{23}{25}$.. 1
3 $\frac{1}{2}$	.. 1	14 .. 1	27 .. 1	5 .. 1
3 $\frac{1}{20}$	.. 1	15 $\frac{1}{5}$.. 1	31 $\frac{2}{5}$.. 1	5 $\frac{12}{25}$.. 1
2 $\frac{3}{5}$	.. 1	17 .. 1	35 .. 1	6 $\frac{1}{5}$.. 1
4 $\frac{13}{70}$	.. 1	13 $\frac{40}{49}$.. 1	24 $\frac{11}{12}$.. 1	4 $\frac{13}{70}$.. 1
3 $\frac{5}{7}$	.. 1	14 $\frac{5}{7}$.. 1	26 $\frac{1}{2}$.. 1	4 $\frac{1}{2}$.. 1
3 $\frac{17}{70}$	.. 1	15 $\frac{34}{35}$.. 1	28 $\frac{7}{10}$.. 1	4 $\frac{17}{50}$.. 1
2 $\frac{27}{35}$	.. 1	17 $\frac{6}{7}$.. 1	32 .. 1	5 $\frac{2}{5}$.. 1
4	.. 1	15 $\frac{2}{3}$.. 1	24 .. 1	4 .. 1
3 $\frac{1}{2}$	.. 1	17 .. 1	26 .. 1	4 $\frac{2}{5}$.. 1
3	.. 1	19 .. 1	29 .. 1	5 .. 1
3 $\frac{43}{50}$	.. 1	18 $\frac{11}{35}$.. 1	23 $\frac{3}{10}$.. 1	3 $\frac{43}{50}$.. 1
3 $\frac{8}{25}$	.. 1	20 $\frac{3}{5}$.. 1	26 .. 1	4 $\frac{2}{5}$.. 1
3 $\frac{4}{5}$	.. 1	23 .. 1	23 .. 1	3 $\frac{4}{5}$.. 1
6 $\frac{13}{10}$	.. 1	6 $\frac{13}{15}$.. 1	30 $\frac{1}{4}$.. 1	6 $\frac{13}{6}$.. 1
5 $\frac{1}{4}$	.. 1	7 $\frac{1}{3}$.. 1	32 $\frac{1}{3}$.. 1	7 $\frac{1}{8}$.. 1

Three Events, all in your favour.				1st. Against your winning them all.	2d. Against your losing them all.		2d. Against your winning the 1st, and losing the 2d & 3d.						
4 to 1	4 to 1	..	5 to 2	..	19	to	16	86 $\frac{1}{2}$	to	1	20 $\frac{7}{8}$	to	1
4..1	4..1	..	2..1	..	43	..	32	74	..	1	17 $\frac{3}{4}$	..	1
4..1	4..1	..	7..4	..	163	..	112	67 $\frac{3}{4}$	..	1	16 $\frac{11}{16}$	..	1
4..1	4..1	..	3..2	..	77	..	48	61 $\frac{1}{2}$	..	1	14 $\frac{5}{8}$	..	1
4..1	4..1	..	5..4	..	29	..	16	55 $\frac{1}{4}$	..	1	13 $\frac{1}{6}$	..	1
4..1	4..1	..	even	..	17	..	8	49	..	1	11 $\frac{1}{2}$	..	1
4..1	3..1	..	3 to 1	..	11	..	9	79	..	1	19	..	1
4..1	3..1	..	5..2	..	4	..	3	69	..	1	16 $\frac{1}{2}$	..	1
4..1	3..1	..	2..1	..	3	..	2	59	..	1	14	..	1
4..1	3..1	..	7..4	..	34	..	21	54	..	1	12 $\frac{3}{4}$	..	1
4..1	3..1	..	3..2	..	16	..	9	49	..	1	11 $\frac{1}{2}$	..	1
4..1	3..1	..	5..4	..	2	..	1	44	..	1	10 $\frac{1}{4}$	..	1
4..1	3..1	..	even	..	7	..	3	39	..	1	9	..	1
4..1	5..2	..	5 to 2	..	29	..	20	60 $\frac{1}{4}$	..	1	14 $\frac{5}{6}$	..	1
4..1	5..2	..	2..1	..	12	..	8	51 $\frac{1}{2}$	..	1	12 $\frac{1}{8}$	..	1
4..1	5..2	..	7..4	..	7	..	4	47 $\frac{1}{8}$	..	1	11 $\frac{7}{32}$	..	1
4..1	5..2	..	3..2	..	23	..	12	42 $\frac{1}{4}$	..	1	9 $\frac{5}{16}$	..	1
4..1	5..2	..	5..4	..	43	..	20	38 $\frac{3}{8}$	..	1	8 $\frac{7}{32}$	..	1
4..1	5..2	..	even	..	5	..	2	34	..	1	7 $\frac{3}{4}$	..	1
4..1	2..1	..	2 to 1	..	29	..	12	44	..	1	10 $\frac{1}{4}$	..	1
4..1	2..1	..	7..4	..	139	..	56	40 $\frac{1}{2}$	..	1	9 $\frac{5}{16}$	..	1
4..1	2..1	..	3..2	..	17	..	8	36 $\frac{1}{4}$	..	1	8 $\frac{3}{8}$	..	1
4..1	2..1	..	5..4	..	19	..	8	32 $\frac{1}{4}$	..	1	7 $\frac{7}{16}$	..	1
4..1	2..1	..	even	..	11	..	4	29	..	1	6 $\frac{1}{2}$	..	1
4..1	7..4	..	7 to 4	..	409	..	196	36 $\frac{3}{8}$	..	1	8 $\frac{29}{64}$	..	1
4..1	7..4	..	3..2	..	191	..	84	33 $\frac{3}{8}$	..	1	7 $\frac{19}{32}$	..	1
4..1	7..4	..	5..4	..	71	..	28	29 $\frac{15}{16}$	..	1	6 $\frac{47}{64}$	..	1
4..1	7..4	..	even	..	41	..	14	26 $\frac{1}{2}$	..	1	5 $\frac{7}{8}$	..	1
4..1	3..2	..	3 to 9	..	89	..	36	30 $\frac{1}{4}$	..	1	6 $\frac{1}{16}$	..	1
4..1	3..2	..	5..4	..	11	..	4	27 $\frac{1}{8}$	..	1	6 $\frac{1}{32}$	..	1
4..1	3..2	..	even	..	19	..	6	24	..	1	5 $\frac{1}{4}$	..	1
4..1	5..4	..	5 to 4	..	61	..	20	24 $\frac{5}{16}$	..	1	5 $\frac{1}{64}$	..	1
4..1	5..4	..	even	..	7	..	2	21 $\frac{1}{2}$	..	1	4 $\frac{3}{8}$	..	1
4..1	even	..	even	..	4	..	1	19	..	1	4	..	1

4th. Against your winning the 1st & 2d, and losing the 3d.	5th. Against your losing the 1st, and winning the 2d and 3d.	6th. Against your losing the 1st & 2d, and winning the 3d.	7th. Against your winning the 1st & 3d, and losing the 2d.	8th. Against your losing the 1st & 3d, and winning the 2d.
4 ¹⁵ ₃₂	to	1	7 ³ ₄	to
3 ¹¹ ₁₆	..	1	8 ² ₈	..
3 ¹⁹ ₃₄	..	1	8 ²³ ₂₈	..
2 ²⁹ ₃₂	..	1	9 ⁶ ₁₂	..
2 ³³ ₆₄	..	1	10 ¹ ₄	..
2 ¹ ₈	..	1	11 ¹ ₂	..
5 ² ₃	..	1	7 ⁹ ₅	..
4 ⁵ ₆	..	1	8 ¹ ₃	..
4	..	1	9	..
3 ⁷ ₁₂	..	1	9 ¹⁰ ₂₁	..
3 ¹ ₆	..	1	10 ¹ ₉	..
2 ³ ₄	..	1	11	..
2 ¹ ₃	..	1	12 ¹ ₃	..
5 ¹ ₈	..	1	8 ⁴ ₅	..
4 ¹	..	1	9 ¹ ₂	..
3 ¹³ ₁₆	..	1	10	..
3 ² ₈	..	1	10 ² ₃	..
2 ¹⁵ ₁₆	..	1	11 ³ ₅	..
5	..	1	13	..
4 ⁵ ₈	..	1	10 ¹ ₄	..
4 ⁵ ₃₂	..	1	10 ¹¹ ₁₄	..
3 ¹¹ ₁₆	..	1	11 ¹ ₂	..
3 ⁷ ₃₂	..	1	12 ¹ ₂	..
2 ³ ₄	..	1	14	..
4 ⁴⁵ ₁₁₂	..	1	11 ¹⁷ ₄₉	..
3 ¹⁵ ₅₆	..	1	12 ⁴ ₂₁	..
3 ⁴⁷ ₁₁₂	..	1	13 ¹ ₇	..
2 ¹¹ ₁₄	..	1	14 ⁵ ₇	..
4 ⁵ ₂₄	..	1	12 ⁸ ₉	..
3 ¹¹ ₁₈	..	1	14	..
3 ¹ ₆	..	1	15 ² ₃	..
4 ¹ ₁₆	..	1	15 ¹ ₁₅	..
3 ¹ ₂	..	1	17	..
4	..	1	19	..
		1	19	..

Three Events, all in your favour.					1st. Against your winning them all.	2nd. Against your losing them all.		3rd. Against your winning the 1st, and losing the 2d & 3d.		
3 to 1	3 to 1	..	3 to 1	..	37 to 27	63	to 1	20 $\frac{1}{3}$	to 1	
3..1	3..1	..	5..2	..	667 ..	45	55	17 $\frac{2}{3}$	..	1
3..1	3..1	..	2..1	..	5 ..	3	47	15	..	1
3..1	3..1	..	7..4	..	113 ..	63	43	13 $\frac{2}{3}$	..	1
3..1	3..1	..	3..2	..	53 ..	27	39	12 $\frac{1}{3}$	..	1
3..1	3..1	..	5..4	..	29 ..	45	35	11	..	1
3..1	3..1	..	even	..	23 ..	9	31	9 $\frac{2}{3}$	..	1
3..1	5..2	..	5 to 2	..	121 ..	75	48	15 $\frac{1}{3}$	..	1
3..1	5..2	..	2..1	..	9 ..	5	41	13	..	1
3..1	5..2	..	7..4	..	29 ..	15	37 $\frac{1}{2}$	11 $\frac{5}{6}$	..	1
3..1	5..2	..	3..2	..	19 ..	9	34	10 $\frac{2}{3}$	..	1
3..1	5..2	..	5..4	..	59 ..	25	30 $\frac{1}{2}$	9 $\frac{1}{2}$	..	1
3..1	5..2	..	even	..	41 ..	15	27	8 $\frac{1}{3}$	..	1
3..1	2..1	..	2 to 1	..	2 ..	1	35	11	..	1
3..1	2..1	..	7..4	..	15 ..	7	32	10	..	1
3..1	2..1	..	3..2	..	7 ..	3	29	9	..	1
3..1	2..1	..	5..4	..	13 ..	5	26	8	..	1
3..1	2..1	..	even	..	3 ..	1	23	7	..	1
3..1	7..4	..	7 to 4	..	337 ..	147	29 $\frac{1}{4}$	9 $\frac{1}{12}$	..	1
3..1	7..4	..	3..2	..	157 ..	63	26 $\frac{1}{2}$	8 $\frac{1}{6}$	..	1
3..1	7..4	..	5..4	..	97 ..	35	23 $\frac{3}{4}$	7 $\frac{1}{4}$	..	1
3..1	7..4	..	even	..	67 ..	21	21	6 $\frac{1}{3}$	..	1
3..1	3..2	..	3 to 2	..	73 ..	27	24	7 $\frac{1}{3}$	..	1
3..1	3..3	..	5..4	..	3 ..	1	21 $\frac{1}{2}$	6 $\frac{1}{2}$	..	1
3..1	3..2	..	even	..	31 ..	9	19	5 $\frac{2}{3}$	..	1
3..1	5..4	..	5 to 4	..	83 ..	25	19 $\frac{1}{4}$	5 $\frac{1}{4}$	..	1
3..1	5..4	..	even	..	19 ..	5	17	5	..	1
3..1	even	..	even	..	13 ..	3	15	4 $\frac{1}{3}$	..	1
5..2	5 to 2	..	5 to 2	..	218 ..	125	41 $\frac{7}{8}$	16 $\frac{3}{20}$	..	1
5..2	5..2	..	2..1	..	97 ..	50	35 $\frac{3}{4}$	13 $\frac{7}{10}$	..	1
5..2	5..2	..	7..4	..	52 ..	27	32 $\frac{1}{16}$	12 $\frac{19}{40}$	..	1
5..2	5..2	..	3..2	..	34 ..	15	29 $\frac{5}{8}$	11 $\frac{1}{4}$	..	1
5..2	5..2	..	5..4	..	316 ..	125	26 $\frac{9}{16}$	10 $\frac{1}{40}$	..	1
5..2	5..2	..	even	..	73 ..	25	23 $\frac{1}{2}$	8 $\frac{5}{4}$	..	1

4th. Against your winning the 1st & 2d, and losing th. 3d.	5th. Against your losing the 1st, and winning the 2d & 3d.	6th. Against your losing the 1st & 2d, and winning the 3d.	7th. Against your winning the 1st & 3d, and losing the 2d.	8th. Against your losing the 1st & 3d, and winning the 2d.
6 $\frac{1}{3}$	to	1	6 $\frac{1}{3}$ to	1
5 $\frac{2}{9}$..	1	6 $\frac{7}{15}$..	1
4 $\frac{1}{3}$..	1	7 ..	1
3 $\frac{8}{9}$..	1	7 $\frac{8}{21}$..	1
3 $\frac{4}{9}$..	1	7 $\frac{8}{9}$..	1
3	..	1	8 $\frac{9}{15}$..	1
2 $\frac{5}{9}$..	1	9 $\frac{4}{3}$..	1
5 $\frac{8}{15}$..	1	6 $\frac{21}{25}$..	1
4 $\frac{9}{15}$..	1	7 $\frac{2}{5}$..	1
4 $\frac{2}{15}$..	1	7 $\frac{4}{5}$..	1
3 $\frac{2}{3}$..	1	8 $\frac{1}{3}$..	1
3 $\frac{1}{5}$..	1	9 $\frac{2}{25}$..	1
2 $\frac{11}{16}$..	1	10 $\frac{1}{5}$..	1
5	..	1	8 ..	1
4 $\frac{1}{2}$..	1	8 $\frac{3}{7}$..	1
4	..	1	9 ..	1
3 $\frac{1}{2}$..	1	9 $\frac{4}{5}$..	1
3	..	1	11 ..	1
4 $\frac{16}{21}$..	1	8 $\frac{43}{49}$..	1
4 $\frac{15}{21}$..	1	9 $\frac{10}{21}$..	1
3 $\frac{2}{7}$..	1	10 $\frac{1}{5}$..	1
3 $\frac{4}{21}$..	1	11 $\frac{4}{7}$..	1
4 $\frac{5}{9}$..	1	10 $\frac{1}{9}$..	1
4	..	1	11 ..	1
3 $\frac{4}{9}$..	1	12 $\frac{1}{3}$..	1
4 $\frac{2}{5}$..	1	11 $\frac{24}{25}$..	1
3 $\frac{4}{5}$..	1	13 $\frac{2}{5}$..	1
4 $\frac{1}{3}$..	1	15 ..	1
5 $\frac{43}{50}$..	1	5 $\frac{43}{50}$..	1
4 $\frac{22}{25}$..	1	6 $\frac{7}{20}$..	1
4 $\frac{3}{100}$..	1	6 $\frac{42}{70}$..	1
3 $\frac{9}{10}$..	1	7 $\frac{1}{6}$..	1
3 $\frac{41}{100}$..	1	7 $\frac{41}{40}$..	1
2 $\frac{23}{26}$..	1	8 $\frac{4}{3}$..	1

Three Events, all in your favour.				1st, Against your winning them all,	2nd, Against your losing them all.	3rd. Against your winning the 1st, and losing the 2d and 3d.
5 to 2	2 to 1	..	2 to 1	..	43	to 20
5..2	2..1	..	7..4	..	161	.70
5..2	2..1	..	3..2	..	5	.. 2
5..2	2..1	..	5..4	..	139	.50
5..2	2..1	..	even	..	32	.10
5..2	7..4	..	7 to 4	..	86	.35
5..2	7..4	..	3..2	..	8	.. 3
5..2	7..4	..	5..4	..	74	.27
5..2	7..4	..	even	..	3 ² ₅	.. 1
5..2	3..2	..	3 to 2	..	26	.. 9
5..2	3..2	..	5..4	..	3 ¹ ₅	.. 1
5..2	3..2	..	even	..	11	.. 3
5..2	5..4	..	5 to 4	..	3 ⁶⁷ ₁₂	.. 1
5..2	5..4	..	even	..	101	.25
5..2	even	..	even	..	23	.. 5
5..1	2 to 1	..	2 to 1	..	19	.. 8
2..1	2..1	..	7..4	..	71	.28
2..1	2..1	..	3..2	..	33	.12
2..1	3..1	..	5..4	..	61	.20
2..1	2..1	..	even	..	3 ¹ ₂	.. 1
2..1	7..4	..	7 to 4	..	265	.98
2..1	7..4	..	3..2	..	41	.14
2..1	7..4	..	5..4	..	227	.70
2..1	7..4	..	even	..	52	.14
2..1	3..2	..	3 to 2	..	57	.18
2..1	3..2	..	5..4	..	3 ¹ ₂	.. 1
2..1	3..2	..	even	..	4	.. 1
2..1	5..4	..	5..4	..	3 ⁴³ ₅₀	.. 1
2..1	5..4	..	even	..	44	.10
2..1	even	..	even	..	5	.. 1
7..4	7..4	..	7 to 4	..	988	.343
7..4	7..4	..	3..2	..	458	.147
7..4	7..4	..	5..4	..	844	.245
7..4	7..4	..	even	..	3 ⁴⁶ ₄₅	.. 1

4th. Against your winning the 1st & 2d, and losing the 3rd.	5th. Against your losing the 1st, and winning the 2d & 3d.	6th. Against your losing the 1st & 2d, and winning the 3rd.	7th. Against your winning the 1st & 3d, and losing the 2d.	8th. Against your losing the 1st & 3d, and winning the 2nd.
$5\frac{3}{10}$	to 1	$6\frac{7}{8}$	to 1	$14\frac{3}{4}$
$4\frac{3}{10}$	.. 1	$7\frac{1}{4}$	.. 1	$15\frac{1}{2}$
$4\frac{1}{4}$	.. 1	$7\frac{3}{4}$	.. 1	$16\frac{1}{2}$
$3\frac{19}{20}$	.. 1	$8\frac{9}{20}$	.. 1	$17\frac{9}{10}$
$3\frac{1}{5}$	.. 1	$9\frac{1}{2}$	.. 1	20
$5\frac{1}{20}$	.. 1	$7\frac{6}{9}$	.. 1	$14\frac{1}{8}$
$4\frac{1}{2}$	.. 1	$8\frac{1}{6}$	.. 1	$15\frac{1}{24}$
$3\frac{19}{20}$	.. 1	$8\frac{9}{10}$	.. 1	$16\frac{1}{40}$
$3\frac{2}{5}$	.. 1	10	.. 1	$18\frac{1}{4}$
$4\frac{5}{8}$	.. 1	$8\frac{13}{16}$	.. 1	$13\frac{7}{12}$
$4\frac{1}{4}$	.. 1	$9\frac{1}{2}$	.. 1	$14\frac{3}{4}$
$3\frac{2}{3}$	.. 1	$10\frac{2}{3}$	.. 4	$16\frac{1}{2}$
$4\frac{9}{100}$	.. 1	$10\frac{1}{6}$	.. 1	$13\frac{7}{40}$
$4\frac{1}{26}$	.. 1	$11\frac{3}{5}$	.. 1	$14\frac{3}{4}$
$4\frac{3}{4}$	.. 1	13	.. 1	$12\frac{1}{2}$
$5\frac{2}{5}$	.. 1	$5\frac{8}{4}$	.. 1	$12\frac{1}{2}$
$5\frac{1}{6}$	.. 1	$6\frac{1}{14}$	.. 1	$13\frac{1}{7}$
$4\frac{5}{8}$	.. 1	$6\frac{1}{2}$	.. 1	14
$4\frac{1}{16}$	.. 1	$7\frac{1}{10}$	.. 1	$15\frac{1}{5}$
$3\frac{1}{2}$	.. 1	8	.. 1	$17\frac{1}{10}$
$5\frac{27}{56}$	.. 1	$6\frac{20}{49}$	.. 1	$11\frac{27}{28}$
$4\frac{25}{28}$	.. 1	$6\frac{6}{7}$	.. 1	$12\frac{1}{4}$
$4\frac{17}{56}$	.. 1	$7\frac{17}{35}$	.. 1	$13\frac{17}{20}$
$3\frac{5}{7}$	.. 1	$8\frac{1}{7}$	.. 1	$15\frac{1}{2}$
$5\frac{1}{4}$	.. 1	$7\frac{1}{3}$	.. 1	$11\frac{1}{2}$
$4\frac{15}{24}$	.. 1	8	.. 1	$12\frac{1}{2}$
4	.. 1	9	.. 1	$14\frac{1}{2}$
$5\frac{3}{40}$	.. 1	$8\frac{18}{25}$	.. 1	$11\frac{3}{20}$
$4\frac{2}{5}$	.. 1	$9\frac{4}{5}$	.. 1	$12\frac{1}{2}$
5	.. 1	11	.. 1	$11\frac{1}{2}$
$5\frac{55}{96}$	.. 1	$5\frac{53}{26}$	.. 1	$10\frac{22}{112}$
$5\frac{17}{98}$	.. 1	$6\frac{7}{84}$	.. 1	$11\frac{29}{48}$
$4\frac{109}{196}$	.. 1	$6\frac{109}{140}$	.. 1	$12\frac{49}{80}$
$3\frac{45}{49}$	.. 1	$7\frac{9}{11}$	.. 1	$14\frac{1}{8}$
				$17\frac{9}{14}$

Three Events, all in your favour.			1st, Against your winning them all.	2nd, Against your losing them all.	3rd. Against your winning the 1st, and losing the 2d & 3d.
7 to 4	3 to 2	..	3 to 2	..	16 to 1
7..4	3..2	..	5..4	..	14 to 1
7..4	3..2	..	even	..	12 to 1
7..4	5..4	..	5 to 4	..	12 to 9
7..4	5..4	..	even	..	11 to 8
7..4	even	..	even	..	10 to 9
3..2	3 to 2	..	3 to 2	..	14 to 5
3..2	3..2	..	5..4	..	13 to 6
3..2	3..2	AND	even	..	11 to 1
3..2	5..4	..	5 to 4	..	11 to 21
3..2	5..4	..	even	..	10 to 1
3..2	even	..	even	..	9 to 8
5..4	5 to 4	..	5 to 4	..	10 to 25
5..4	5..4	..	even	..	9 to 8
5..4	even	..	even	..	8 to 7
even	even	..	even	..	7 to 6

EXPLANATIONS of

SUPPOSE three events depending, on the first of which it is 6 to 1 for you, on the second and third, 3 to 1 and 2 to 1 against you, and you want to know the odds against winning them all; look for the page and line where 6 to 1, 3 to 1, and 2 to 1, all in your favour, stand in the third column, where it is written at the top, "against your winning the first, and losing the second and third," in which you will find it to be 13 to 1 against you; operated thus: $\frac{6}{7} \times \frac{4}{3} \times \frac{1}{2} = \frac{6}{7}$, $84 - 6 = 78$ to 6, which being contracted is 13 to 1, as in the table.

Suppose 5 to 2 for you on the first, 5 to 2 and 5 to 4 against you on the second and third, what are the odds against winning them all? Look for

4th. Against your winning the 1st & 2d, and losing the 3d.	5th. Against your losing the 1st, and winning the 2d & 3d.	6th. Against your losing the 1st & 2d, and winning the 3rd.	7th. Against your winning the 1st & 3d, and losing the 2d.	8th. Against your losing the 1st & 3d, and winning the 2d.
$5\frac{2}{3}$	$6\frac{2}{3}$	$10\frac{1}{2}$	$5\frac{2}{3}$	$10\frac{11}{14}$
$4\frac{2}{3}$	$7\frac{1}{4}$	$11\frac{3}{8}$	$6\frac{1}{4}$	$9\frac{5}{16}$
$4\frac{5}{21}$	$8\frac{1}{6}$	$12\frac{3}{4}$	$6\frac{6}{7}$	$8\frac{1}{6}$
$5\frac{51}{140}$	$7\frac{91}{100}$	$10\frac{11}{80}$	$5\frac{51}{140}$	$10\frac{11}{80}$
$4\frac{21}{25}$	$8\frac{9}{10}$	$11\frac{3}{8}$	$6\frac{1}{4}$	$8\frac{9}{10}$
$5\frac{2}{7}$	10	10	$5\frac{2}{7}$	10
$5\frac{17}{18}$	$5\frac{17}{18}$	$9\frac{5}{12}$	$5\frac{17}{18}$	$9\frac{5}{12}$
$5\frac{1}{4}$	$6\frac{1}{2}$	$10\frac{1}{4}$	$6\frac{1}{2}$	$8\frac{3}{24}$
$4\frac{5}{9}$	$7\frac{1}{3}$	$11\frac{1}{2}$	$7\frac{1}{3}$	$7\frac{1}{3}$
$5\frac{3}{4}$	$7\frac{1}{10}$	$9\frac{1}{8}$	$5\frac{3}{4}$	$9\frac{1}{8}$
5	8	$10\frac{1}{4}$	$5\frac{1}{2}$	8
$5\frac{2}{3}$	9	9	$5\frac{2}{3}$	9
$6\frac{28}{100}$	$6\frac{29}{100}$	$8\frac{9}{80}$	$6\frac{29}{100}$	$8\frac{9}{30}$
$5\frac{12}{25}$	$7\frac{1}{10}$	$9\frac{1}{8}$	$7\frac{1}{10}$	$7\frac{1}{80}$
$6\frac{1}{5}$	8	8	$6\frac{1}{5}$	8
7	7	7	7	7

THE FOREGOING TABLES.

the line wherein you have "5 to 2, 5 to 2, and 5 to 4, all in your favour," and in the third column you have $10\frac{1}{2}$ to 1.—The operation stands thus : $\frac{5}{7} \times \frac{2}{7} \times \frac{4}{9} = \frac{4}{41}$: $441 - 40 = 401$ to 40, and contracted, by dividing 401 by 40, you will have $10\frac{1}{2}$ to 1, as in the table.

Suppose 4 to 1 against you on the first, 3 to 1 for you on the second, and 3 to 2 for you on the third, what are the odds against winning them all? Look for the line where it stands "4 to 1, 3 to 1, and 3 to 2, all in your favour," and in the fifth column, marked, "against your losing the first, and winning the second and third," you will see it to be $10\frac{1}{2}$ to 1, worked $\frac{1}{3} \times \frac{3}{4} \times \frac{3}{5} = \frac{9}{20}$ as per tables.

*An AFFIDAVIT to prove the QUALIFICATION of a
HUNTER.*

A. B. of London, Gent. maketh oath, and saith, that a bay mare, called _____, which this deponent (by his servant) now offers to enter and run for the Hunter's Plate, at Reading, never started for either match or plate, but has been actually used as a hunter at the last season, and not only to get the name, but really as a hunter: nor has she been in sweats with an intention to run, but only from Lady-day last. A. B.

Sworn before me this _____ day of ____ 18____
voluntarily. T—D—V.

THE END.

(91)

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